STR-DH130

SERVICE MANUAL

Ver. 1.0 2012.01

US Model
Canadian Model
AEP Model



Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
(US model only)

With 8 ohm loads, both channels driven, from 20 – 20,000 Hz; rated 90 watts per channel minimum RMS power, with no more than 0.09% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

US, Canadian and AEP models[1)]

Minimum RMS Output Power (8 ohms, 20 Hz – 20 kHz, THD 0.09%)
90 W + 90 W

Stereo Mode Output Power (8 ohms, 1 kHz, THD 1%)
100 W + 100 W

[1)]Measured under the following conditions:

Area	Power requirements
US, Canadian	120 V AC, 60 Hz
AEP	230 V AC, 50 Hz

Frequency response
Analog: 10 Hz – 70 kHz +0.5/–2 dB (with BASS = 0 dB, TREBLE = 0 dB)

Input
Analog (PORTABLE IN): Sensitivity: 1 V/ 50 kilohms S/N[2)]: 96 dB (A, 500 mV[3)])

Inputs
Analog (Except PORTABLE IN): Sensitivity: 500 mV/ 50 kilohms S/N[2)]: 96 dB (A, 500 mV[3)])

Outputs
Analog (AUDIO OUT): Voltage: 500 mV/ 10 kilohms

Tone
Gain levels: ±10 dB, 1 dB step

[2)]INPUT SHORT (with BASS = 0 dB, TREBLE = 0 dB).
[3)]Weighted network, input level.

FM tuner section

Tuning range: 87.5 MHz – 108.0 MHz
Antenna (aerial): FM wire antenna (aerial)
Antenna (aerial) terminals: 75 ohms, unbalanced

AM tuner section

Tuning range

Area	Tuning scale	
	10 kHz step	9 kHz step
US, Canadian	530 kHz – 1,710 kHz	531 kHz – 1,710 kHz
AEP	–	531 kHz – 1,602 kHz

Antenna (aerial): Loop antenna (aerial)

General

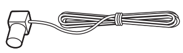
Power requirements

Area	Power requirements
US, Canadian	120 V AC, 60 Hz
AEP	230 V AC, 50/60 Hz

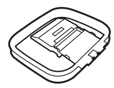
Power consumption: 200 W
Power consumption (during standby mode): 0.3 W
Dimensions (w/h/d) (Approx.): 430 mm × 132.5 mm × 279 mm (17 in × 5 1/4 in × 11 in) including projecting parts and controls
Mass (Approx.): 6.4 kg (14 lb 2 oz)

Supplied accessories

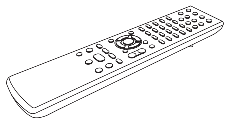
- Operating Instructions
- Quick Setup Guide
- FM wire antenna (aerial) (1)



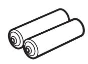
- AM loop antenna (aerial) (1)



- Remote control (RM-AAU130) (1)



- R6 (size AA) batteries (2)



Design and specifications are subject to change without notice.

Halogenated flame retardants are not used in the certain printed wiring boards.

FM STEREO / FM-AM RECEIVER

9-890-596-01
2012A08-1

Sony Corporation
Published by Sony EMCS (Malaysia) PG Tec

SONY®

SAFETY CHECK-OUT (US MODEL)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.).
Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

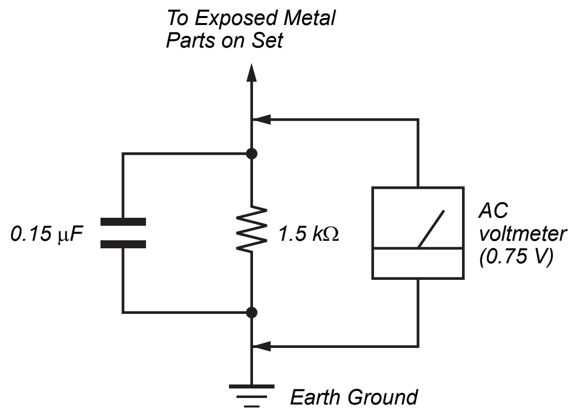


Fig. A. Using an AC voltmeter to check AC leakage.

MODEL IDENTIFICATION
–BACK PANEL–



Model	Part No.
US	4-408-213-0
AEP	4-408-213-1
Canadian	4-408-213-2

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SAFETY-RELATED COMPONET WARNING!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

TABLE OF CONTENTS

SECTION 1
DISASSEMBLY

Note: This set can be disassemble according to the following sequence.

SET

↓

1-1. CASE
(Page 4)

↓

1-2. BACK PANEL SECTION
(Page 5)

↓

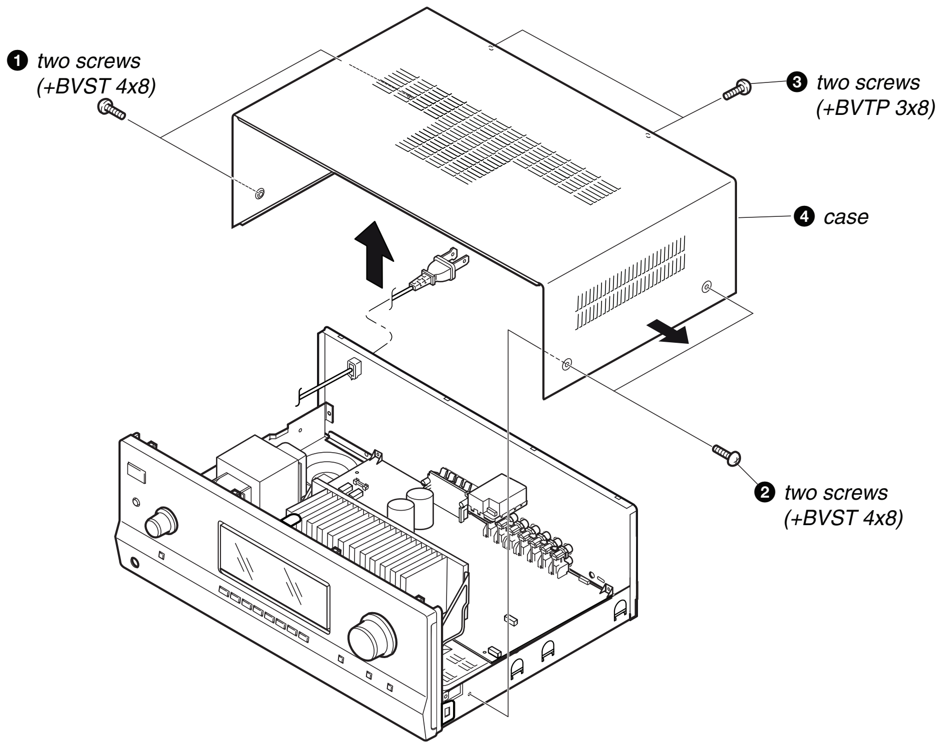
1-3. FRONT PANEL SECTION
(Page 5)

↓

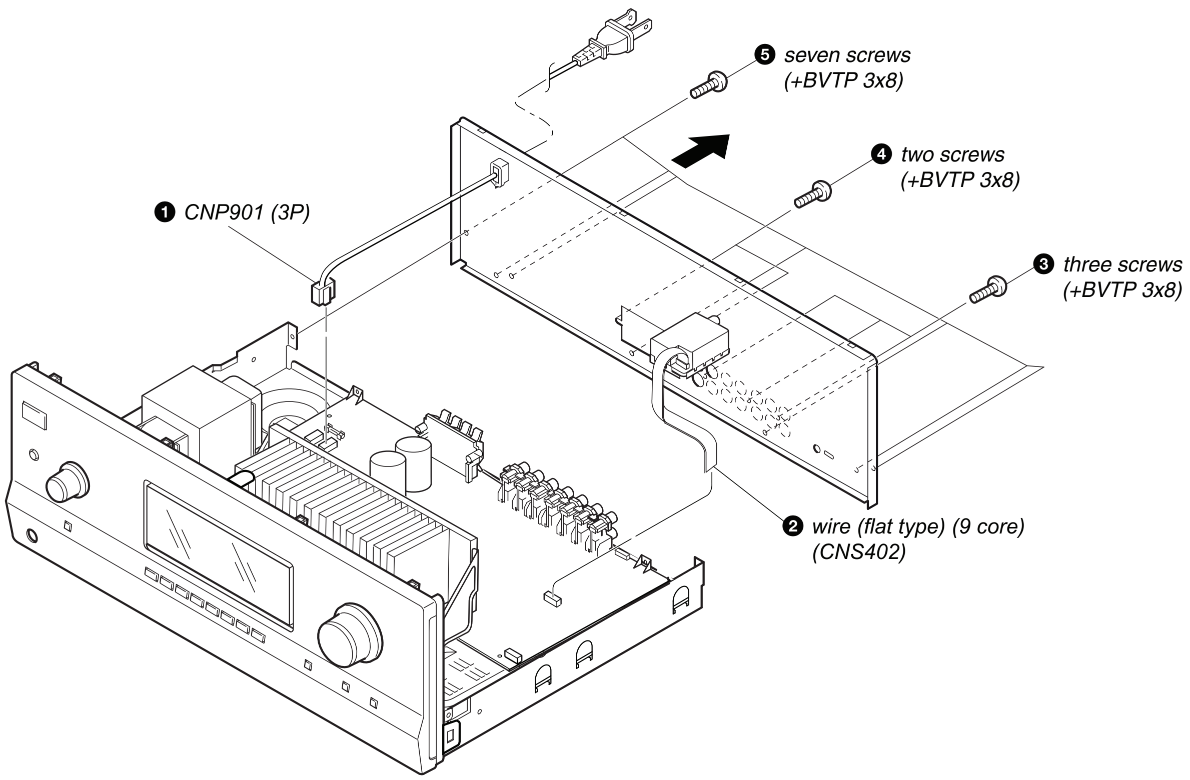
1-4. MAIN BOARD SECTION
(Page 6)

Note: Follow the disassembly procedure in the numerical order given.

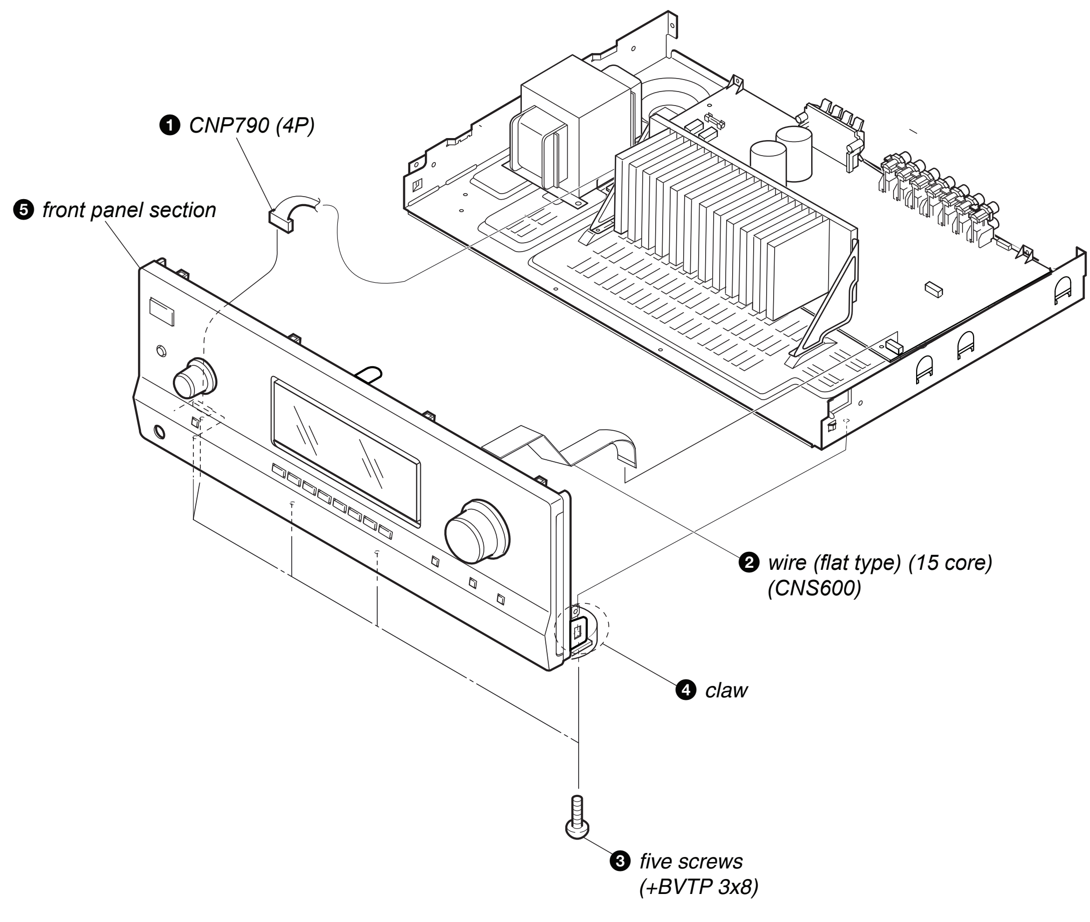
1-1. CASE



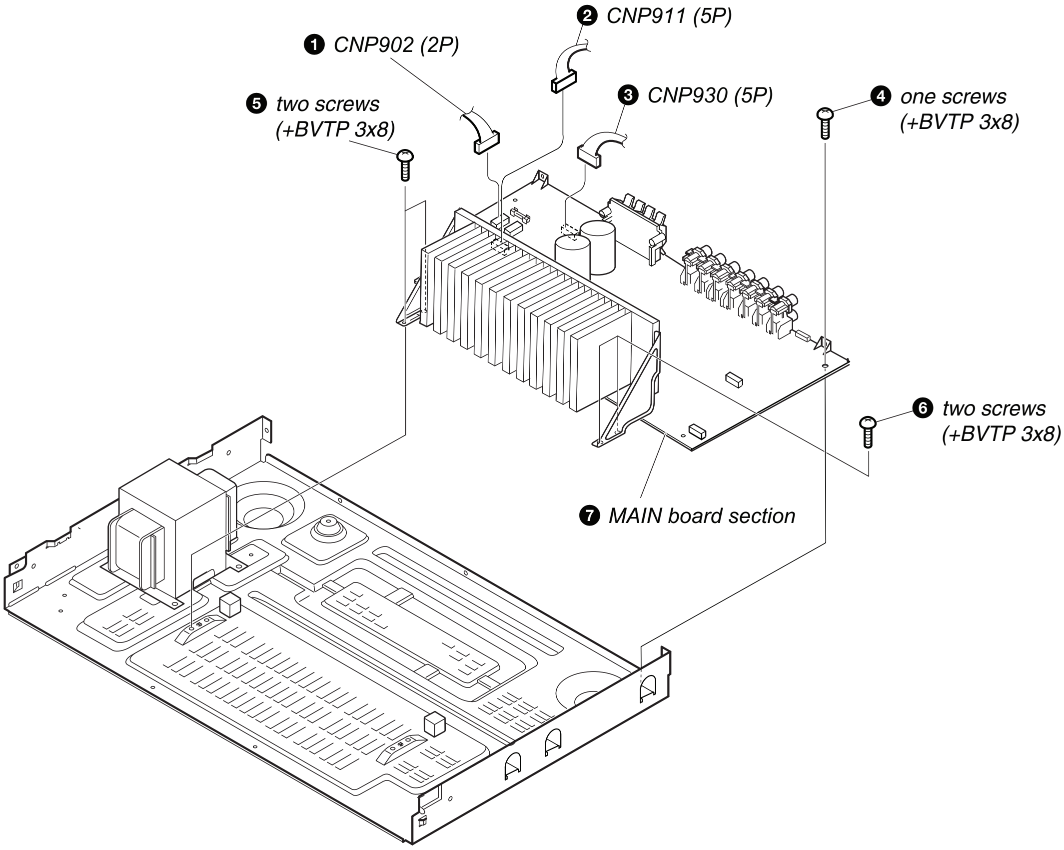
1-2. BACK PANEL SECTION



1-3. FRONT PANEL SECTION



1-4. MAIN BOARD SECTION



SECTION 2
TEST MODE

[AM CHANNEL STEP 9 kHz/10 kHz SELECTION MODE] (US, Canadian model only)

* Either the 9 kHz step or 10 kHz step can be selected for the AM channel step.

* Procedure:

1. While pressing the [TUNING MODE] button, press the [I/⏻] button to turn on the main power.
2. The message “9K STEP” or “10K STEP” appears for a moment
   and the channel step is changed.

[SOFTWARE VERSION DISPLAY MODE]

* The software version is displayed.
* Procedure:

1. While pressing the [SPEAKERS (OFF/A/B/A+B)] and the [MUTING] buttons simultaneously, press the [I/⏻] button to turn on the main power.
2. The destination and the software version are displayed.

Destination	D1	D2	D3	VERSION			
UNKNOWN	U	N	K				
U2	U	2		1.	0	5	A
CA2	C	A	2	2.	0	5	A
CEL	C	E	L	3.	0	5	A

[KEY CHECK MODE]

* Button check
* Procedure:

1. While pressing the [SPEAKERS (OFF/A/B/A+B)] and the [DIMMER] buttons simultaneously, press the [I/⏻] button to turn on the main power.
2. The message “REST 13” appears.
3. Every press of any button other than the [I/⏻] counts down the buttons. The buttons which are already counted once are not counted again. When all buttons are pressed “REST 00” appears.

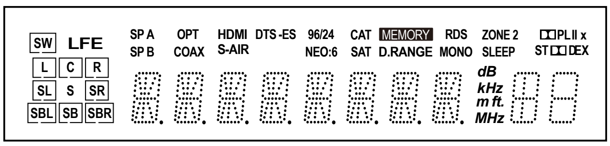
[VACUUM FLUORESCENT DISPLAY TEST MODE]

* All fluorescent segments are tested. When this test is activated, all segments light on at the same time, then each segment lights on one after another.

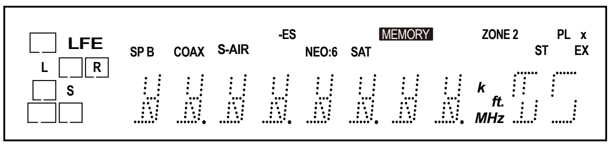
* Procedure:

  While pressing the [SPEAKER (OFF/A/B/A+B)] and the [DISPLAY] buttons simultaneously, press the [I/⏻] button to turn on the main power.

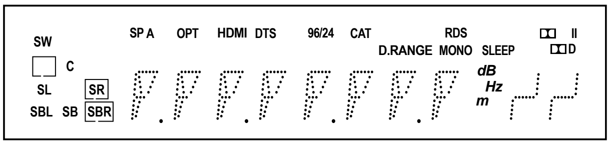
1. ALL segments light on.



2. Turn the [INPUT SELECTOR] control, confirm display.



3. Turn the [INPUT SELECTOR] control, confirm display.



4. Turn the [INPUT SELECTOR] control, all segments light off.

[HISTORY MODE]

* The state that the set is used is memorized.
* Procedure:

1. While pressing the [TREBLE +] and [SPEAKERS (OFF/A/B/A+B)] buttons, press the [I/⏻] button to turn on the power and “HISTORY” is displayed.
2. Each time the [↑]/[↓] buttons on the remote commander is pressed, the item is switched in order as follows.

Item	Display
History	HISTORY
Count how many time of protector happen	COUNT xx
Total single power on time	xxxxxHxx01
Input function	FUNCTION
HP ON/OFF	HP xxx
Volume	VOL xxx
Bass	BASS xxx
Treble	TREB xxx
Balance	F xxx
Total power on time	xxxxxHxx02
Muting	MUTE xxx
Power on counter (Rebox Test Mode)	REBXxxxx
Protector Type	PROTxxxx
VACS step	VACS xx
Return to history	HISTORY

[PROTECTOR AUTO OFF]

* To disable auto off after protector occur
* Procedure:

1. While pressing the [TREBLE -] and [SPEAKERS (OFF/A/B/A+B)] buttons, press the [I/⏻] button to turn on the main power.
2. “PROT OFF” appears and switch off the set.

[SHIPMENT MODE]

* All preset contents are reset to the default setting.
* Procedure:

1. While pressing the [TUNING MODE] and the [MUTING] buttons simultaneously, press the [I/⏻] button to turn on the main power.
2. “CLEARING” and “CLEARED” appear and switch off the set.

[DESTINATION WRITE MODE]

* Write the set destination when the destination is “UNKNOWN”.
  This mode can be performed once only.
* Procedure:

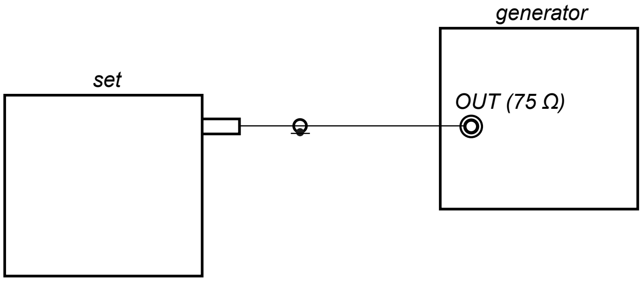
1. Press the [I/⏻] button to turn on the main power.
2. Press the [FM MODE] and [DISPLAY] buttons simultaneously.
3. “DEST XXX” appears and turns [INPUT SELECTOR] to select the required destination.

Selection	Destination
DEST U2	U.S.A
DEST CEL	Europe
DEST CA2	CANADA

4. Press [MEMORY/ENTER] button to save the destination.
5. “CLEARING” and “CLEARED” appear and the set will switch on.
6. Perform [SOFTWARE VERSION DISPLAY MODE] to confirm the written destination.

SECTION 3
FM TUNER CHECK

FM AUTO STOP CHECK



Procedure:
1. Turn on the set.
2. Input the following signal from Signal Generator to FM antenna input directly.

* Carrier Frequency: A=87.5 MHz, B=98 MHz, C=108 MHz
Deviation : 75 kHz
Modulation : 1 kHz
ANT input : 35 dBu (EMF)

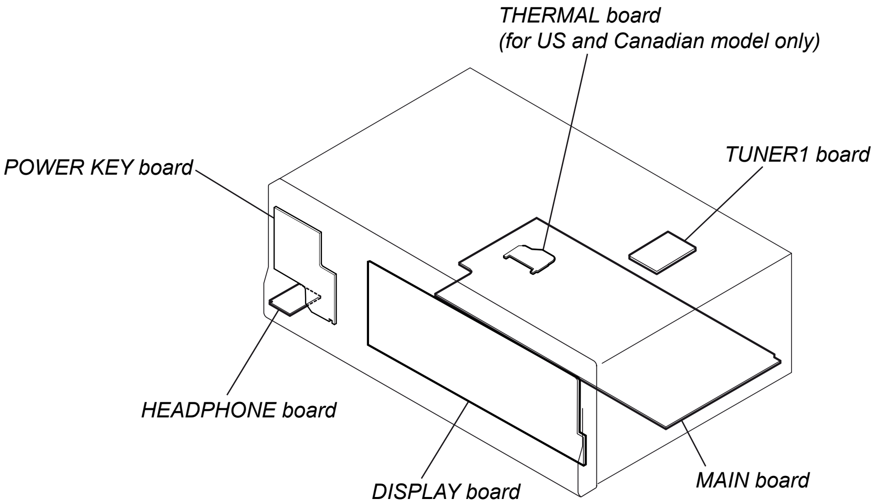
Note:
Please use 75 ohm "coaxial cable" to connect SG and the set. You cannot use video cable for checking.
Please use SG whose output impedance is 75 ohm.

3. Set to FM tuner function and scan the input FM signal with automatic scanning.
4. Confirm that input Frequency of A, B and C are detected and automatic scanning stops.

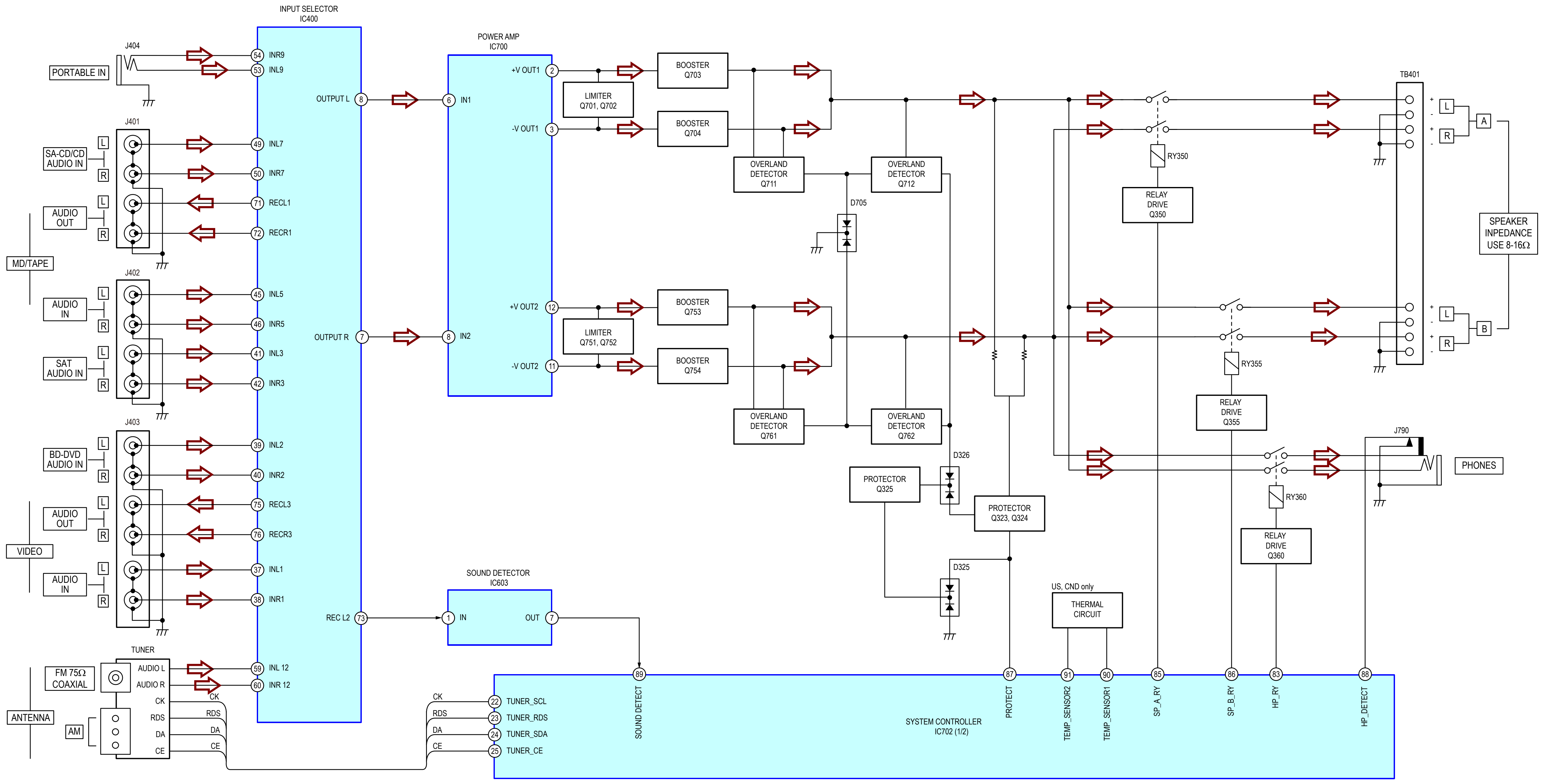
The stop of automatic scanning means "The station signal is received in good condition."

SECTION 4
DIAGRAMS

• Circuit Boards Location



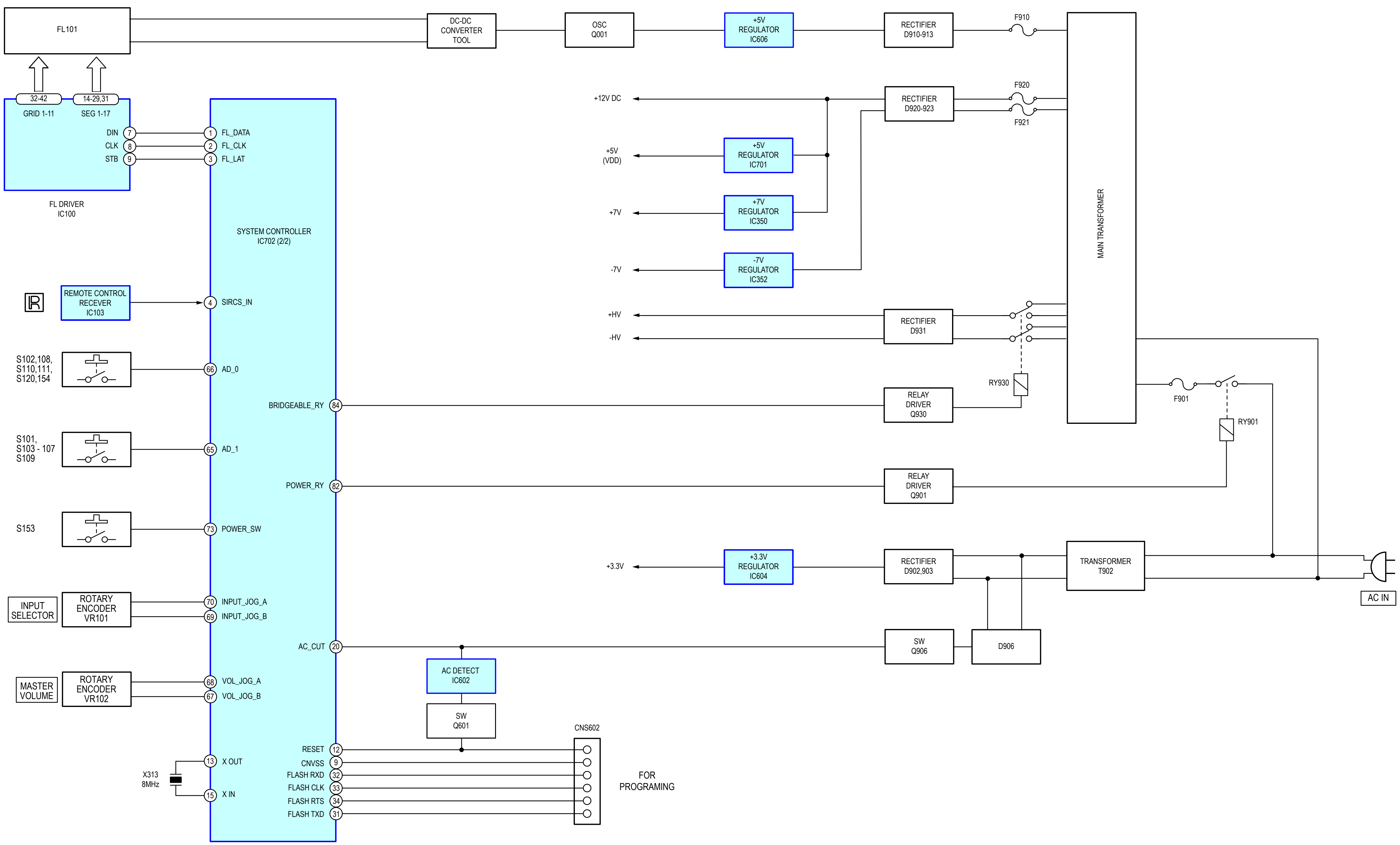
4-1. BLOCK DIAGRAM — MAIN SECTION —



• Signal path
: AUDIO

• Abbreviation
CND: Canadian model

4-2. BLOCK DIAGRAM — DISPLAY AND POWER SECTION —



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Printed Wiring Boards.
Note:
- o——— : Parts extracted from the component side.
- △ : internal component.
- (green pattern) : Pattern from the side which enables seeing.

Caution:	
Parts face side: (SIDE A)	Parts on the parts face side seen from the parts face are indicated.
Pattern face side: (SIDE B)	Parts on the pattern face side seen from the pattern face are indicated.

- Abbreviation
  CND : Canadian model

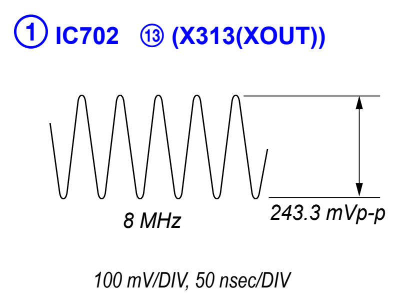
For Schematic Diagrams.
Note:
- All capacitors are in μF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- : B+ Line.
- : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveform.
- Signal path.
  : ANTENNA (FM/AM)
  : AUDIO
- Abbreviation
  CND : Canadian model

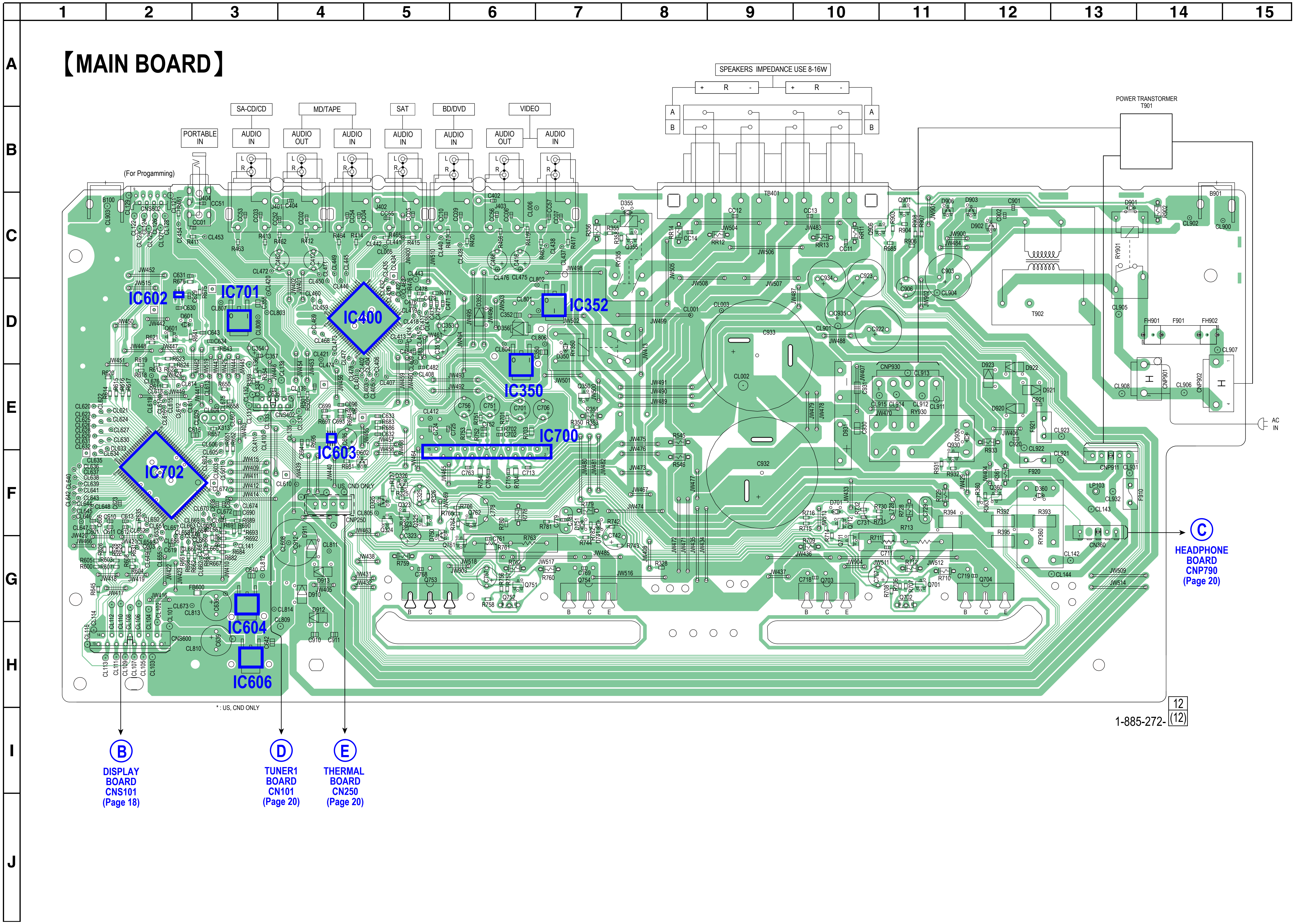
- **Waveforms**

– MAIN Board –

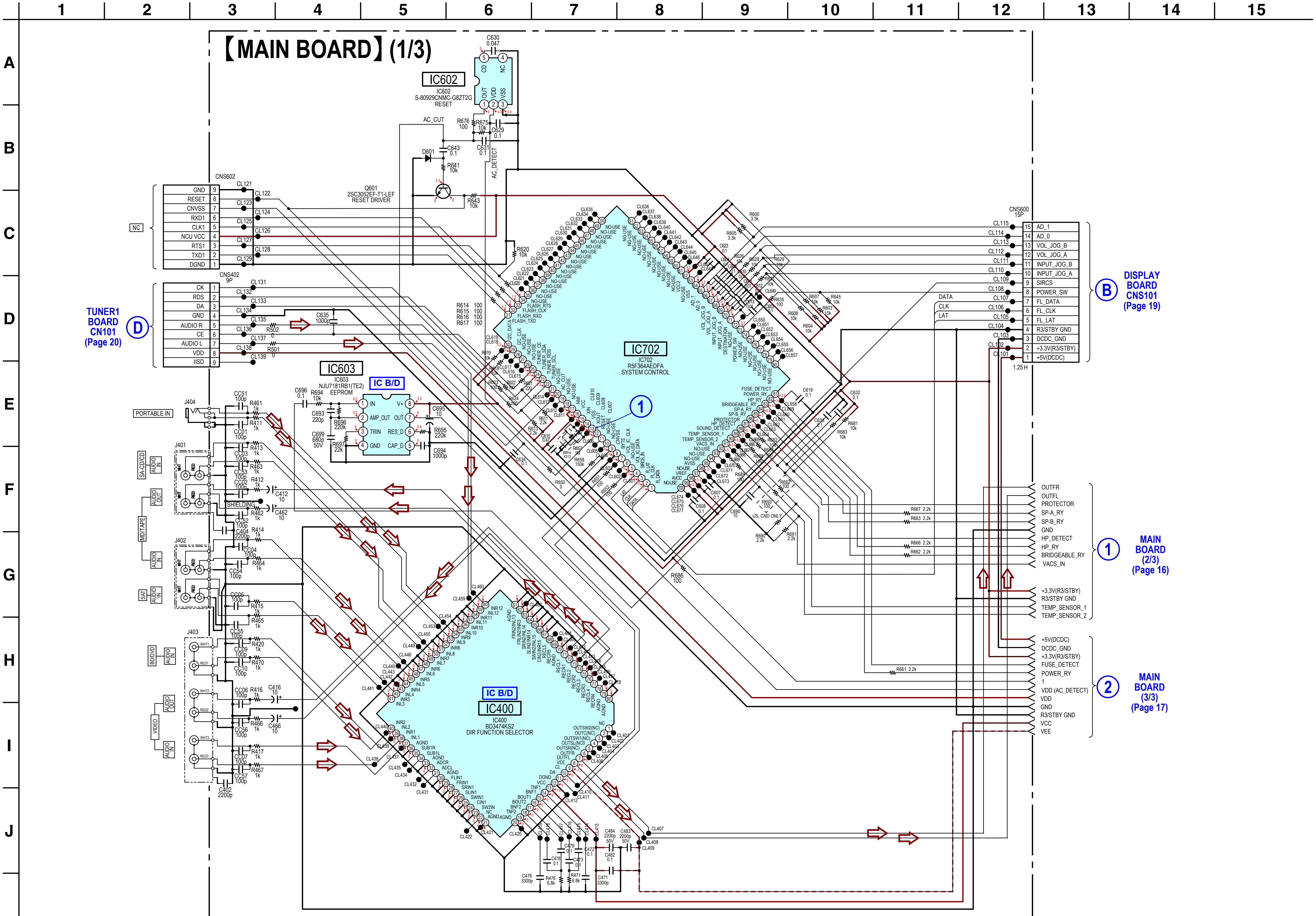


4-3. PRINTED WIRING BOARD — MAIN BOARD —

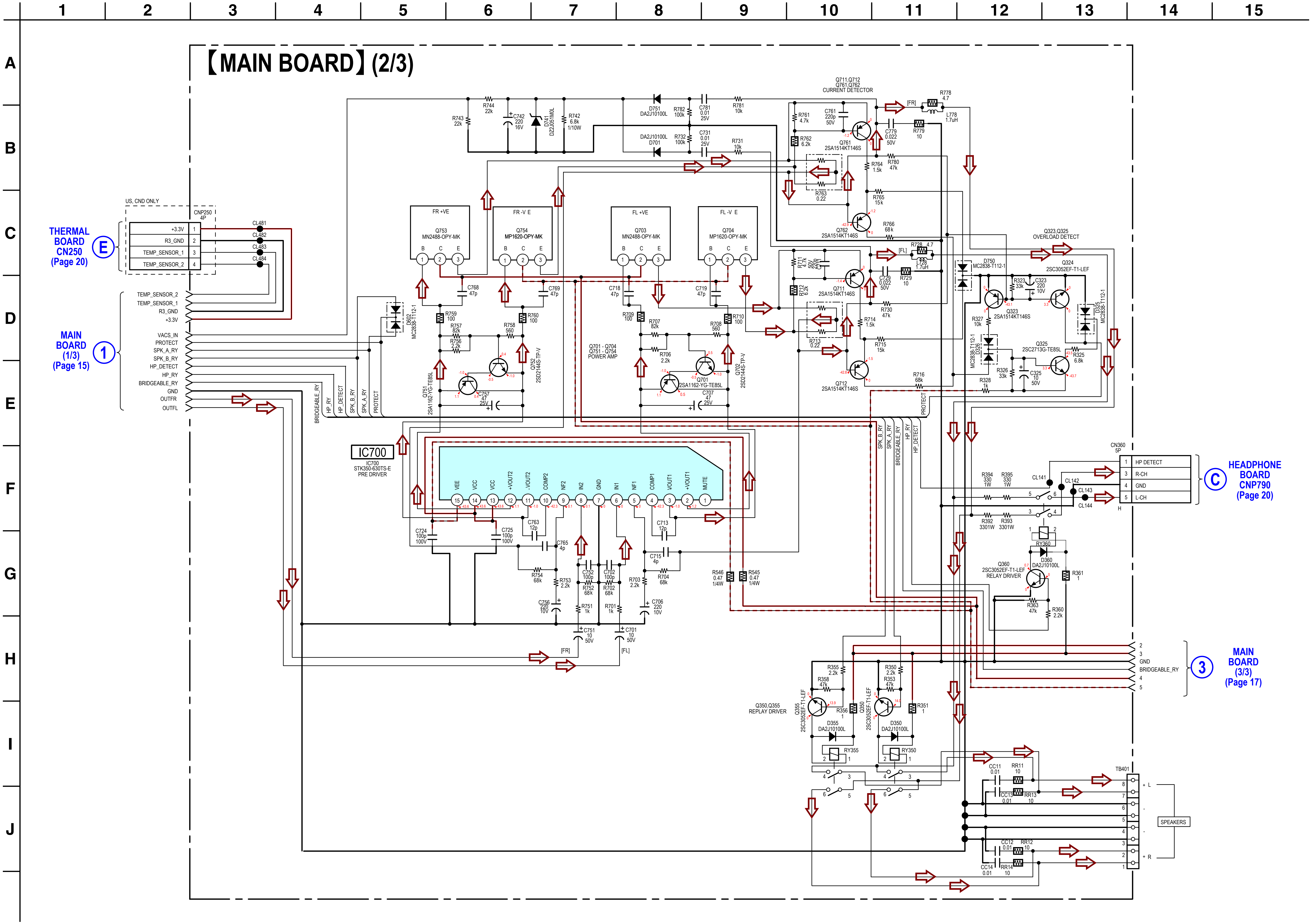
• Refer to page 10 for Circuit Boards Location.
: Uses unleaded solder.



4-4. SCHEMATIC DIAGRAM — MAIN BOARD 1/3 — • See page 13 for Waveforms. • Refer to page 21 IC Block Diagrams. • See page 24 for IC Pin Function Descriptions.

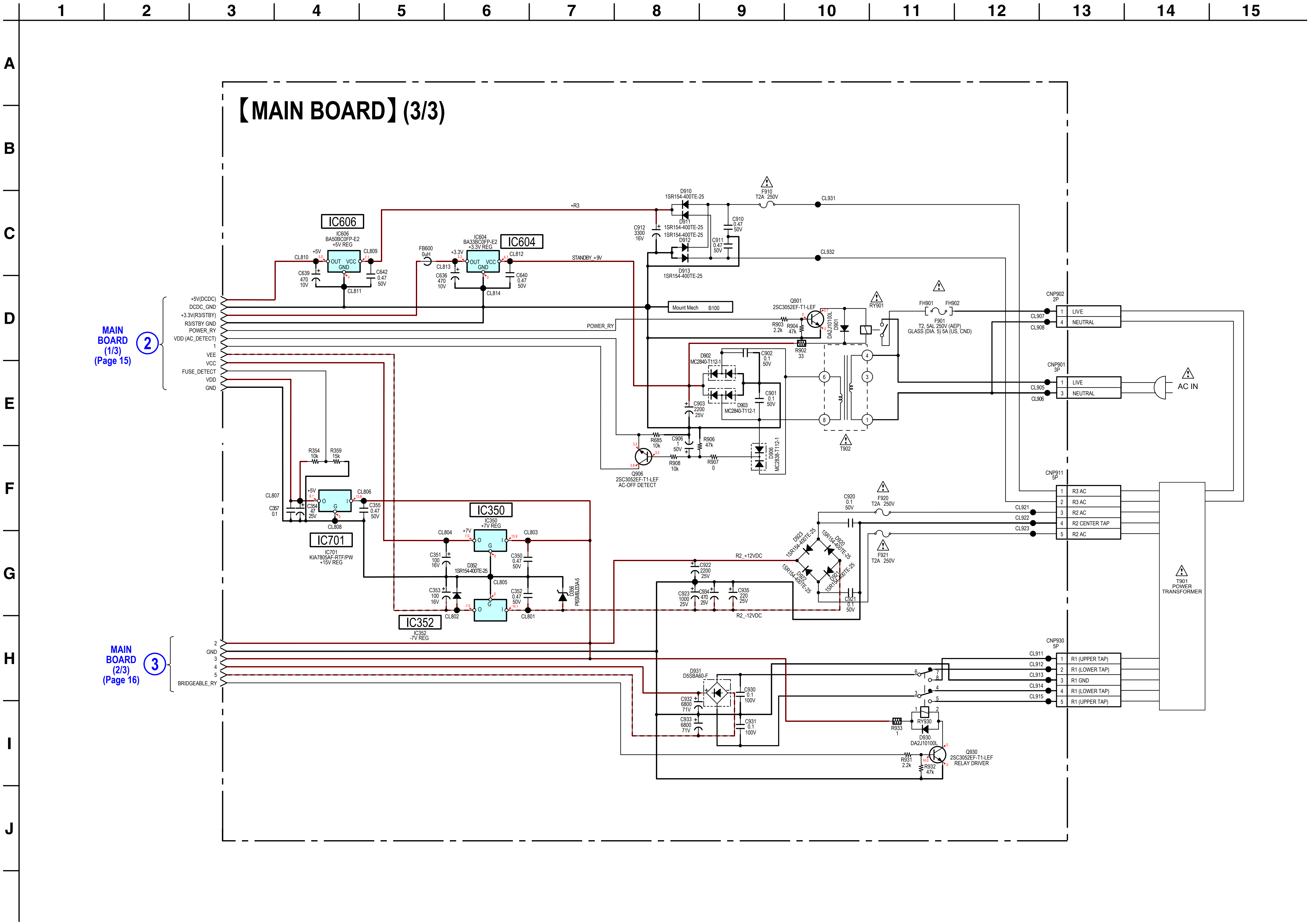


4-5. SCHEMATIC DIAGRAM — MAIN BOARD 2/3 • Refer to page 21 IC Block Diagrams.



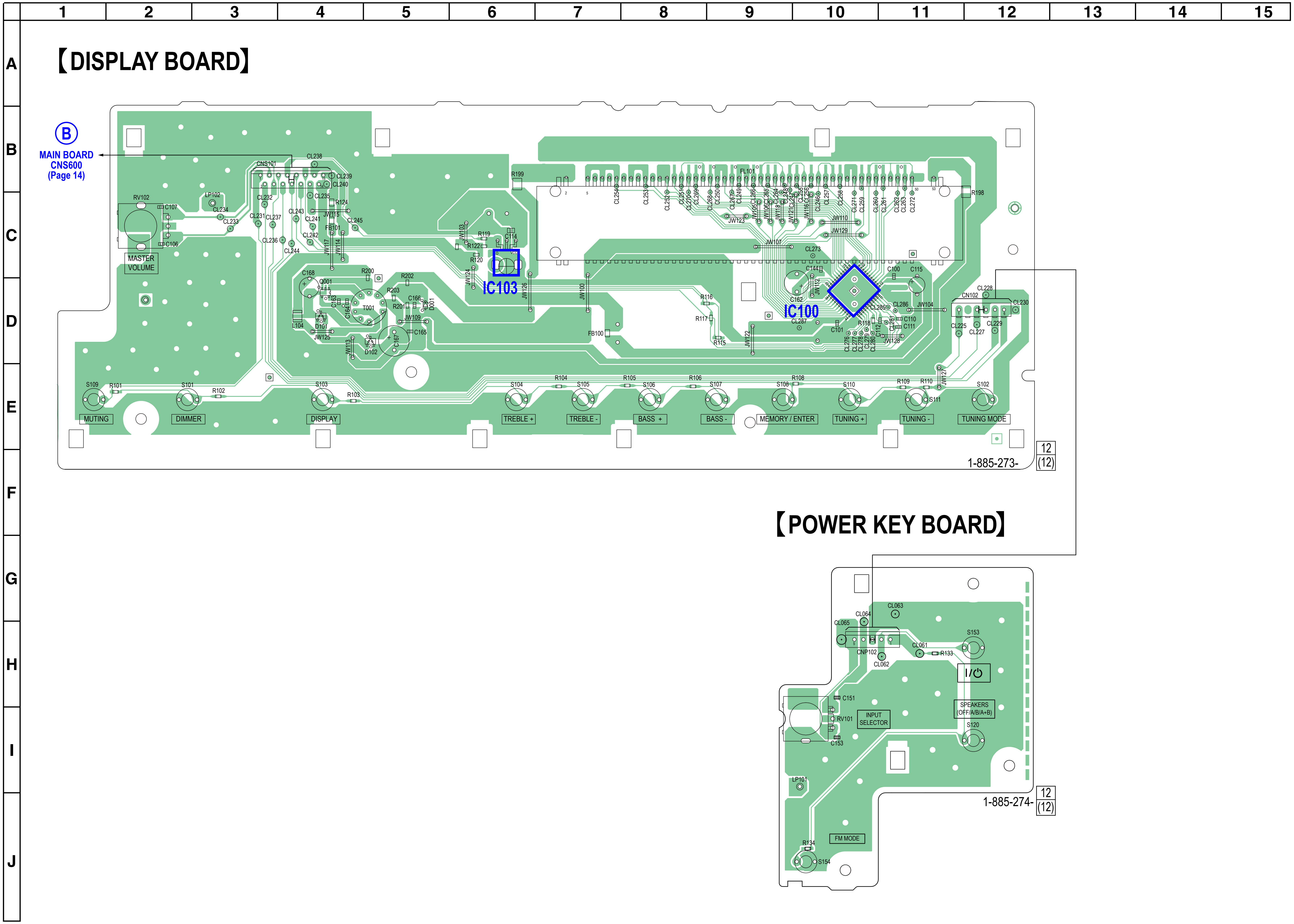
4-6. SCHEMATIC DIAGRAM — MAIN BOARD 3/3

• Refer to page 21 IC Block Diagrams.



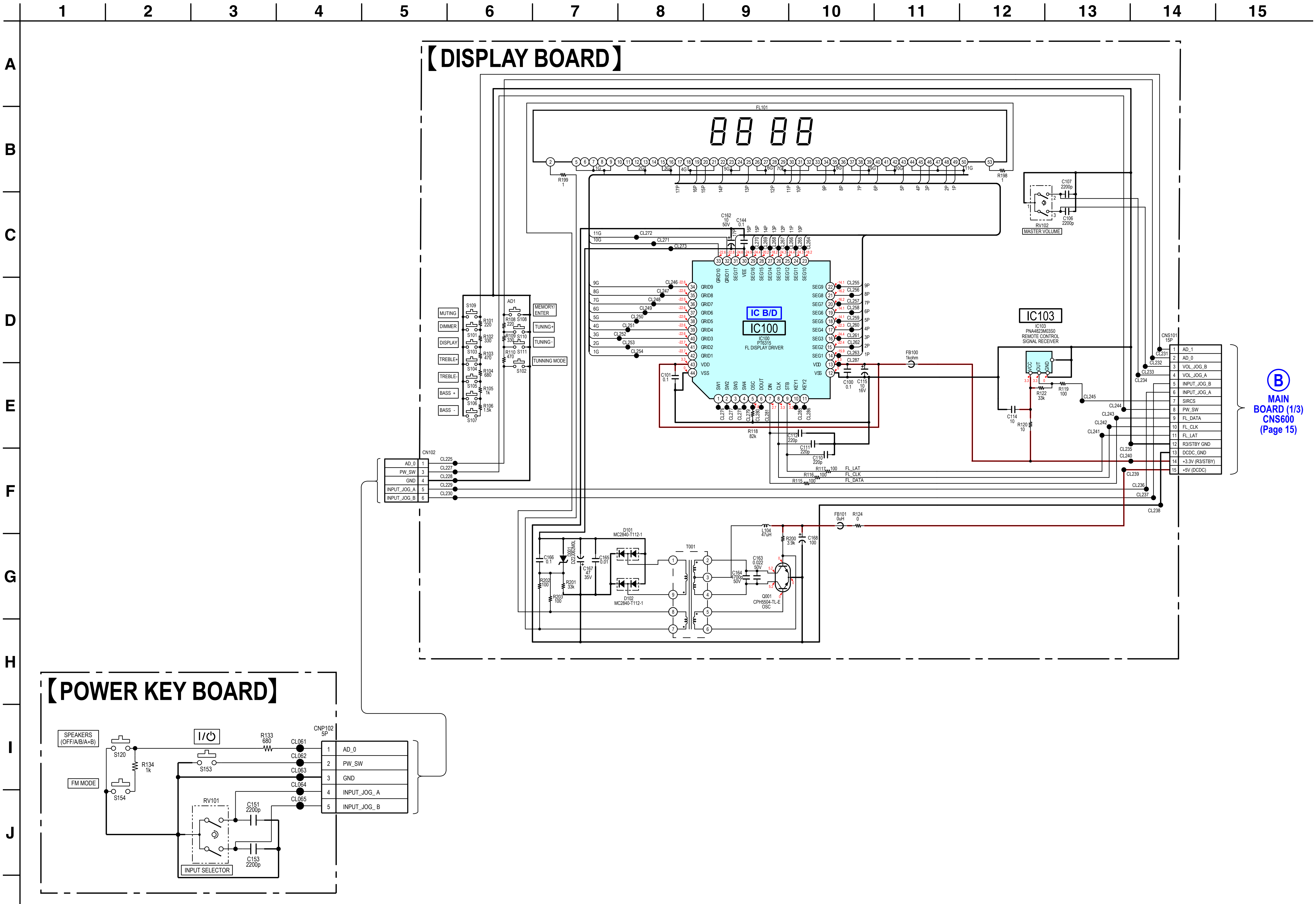
4-7. PRINTED WIRING BOARD — DISPLAY AND POWER KEY BOARD —

• Refer to page 10 for Circuit Boards Location.



4-8. SCHEMATIC DIAGRAM — DISPLAY AND POWER KEY BOARD —

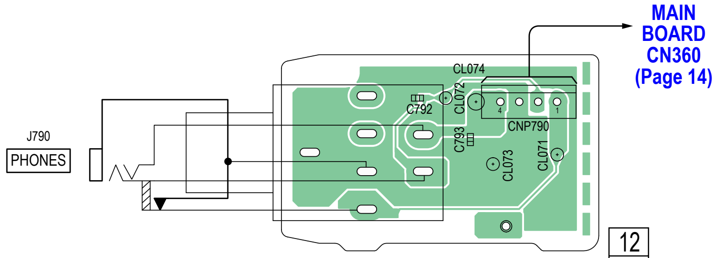
• Refer to page 21 IC Block Diagrams.



4-9. PRINTED WIRING BOARD — HEADPHONE, THERMAL AND TUNER1 BOARD —

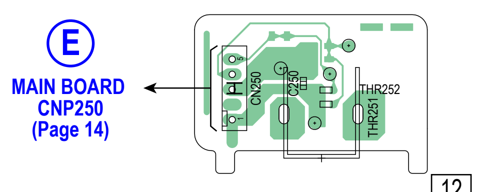
• Refer to page 10 for Circuit Boards Location. : Uses unleaded solder.

【HEADPHONE BOARD】



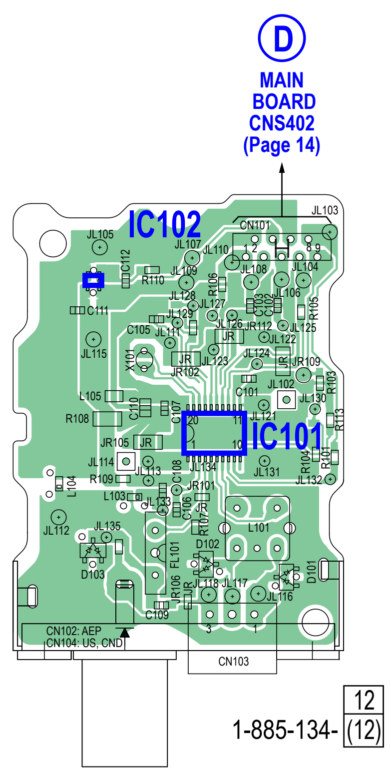
1-885-275- 12 (12)

【THERMAL BOARD】 (FOR US AND CND MODEL ONLY)



1-886-394- 12 (12)

【TUNER1 BOARD】

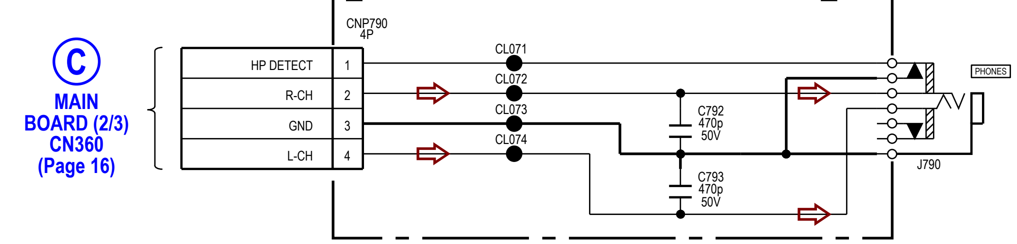


1-885-134- 12 (12)

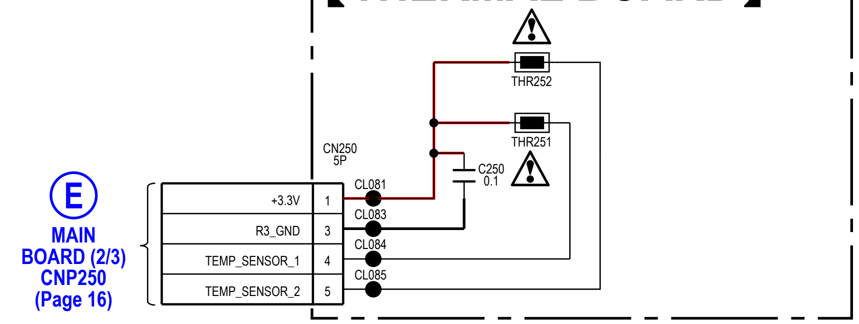
4-10. SCHEMATIC DIAGRAM — HEADPHONE, THERMAL AND TUNER1 BOARD —

• Refer to page 21 IC Block Diagrams.

【HEADPHONE BOARD】

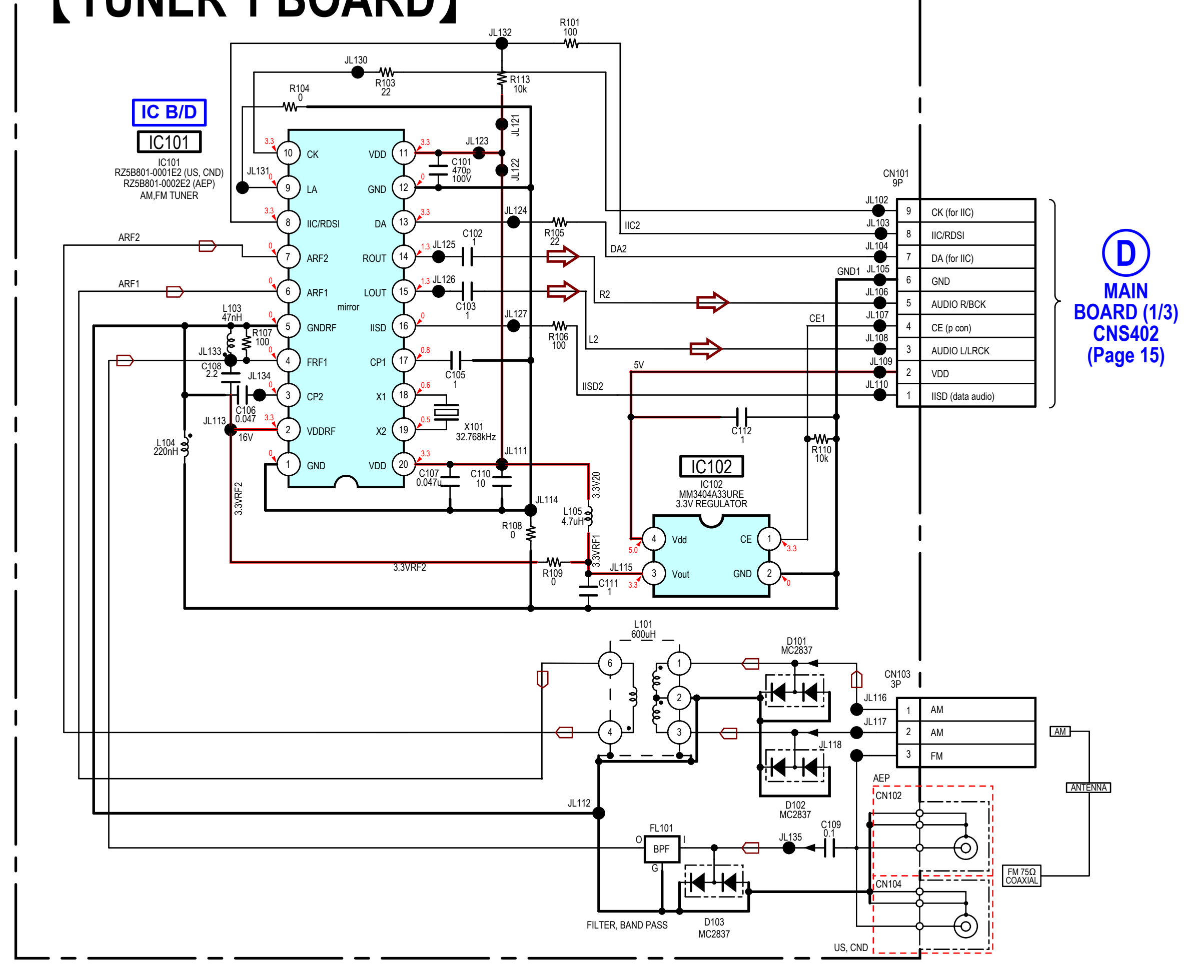


【THERMAL BOARD】



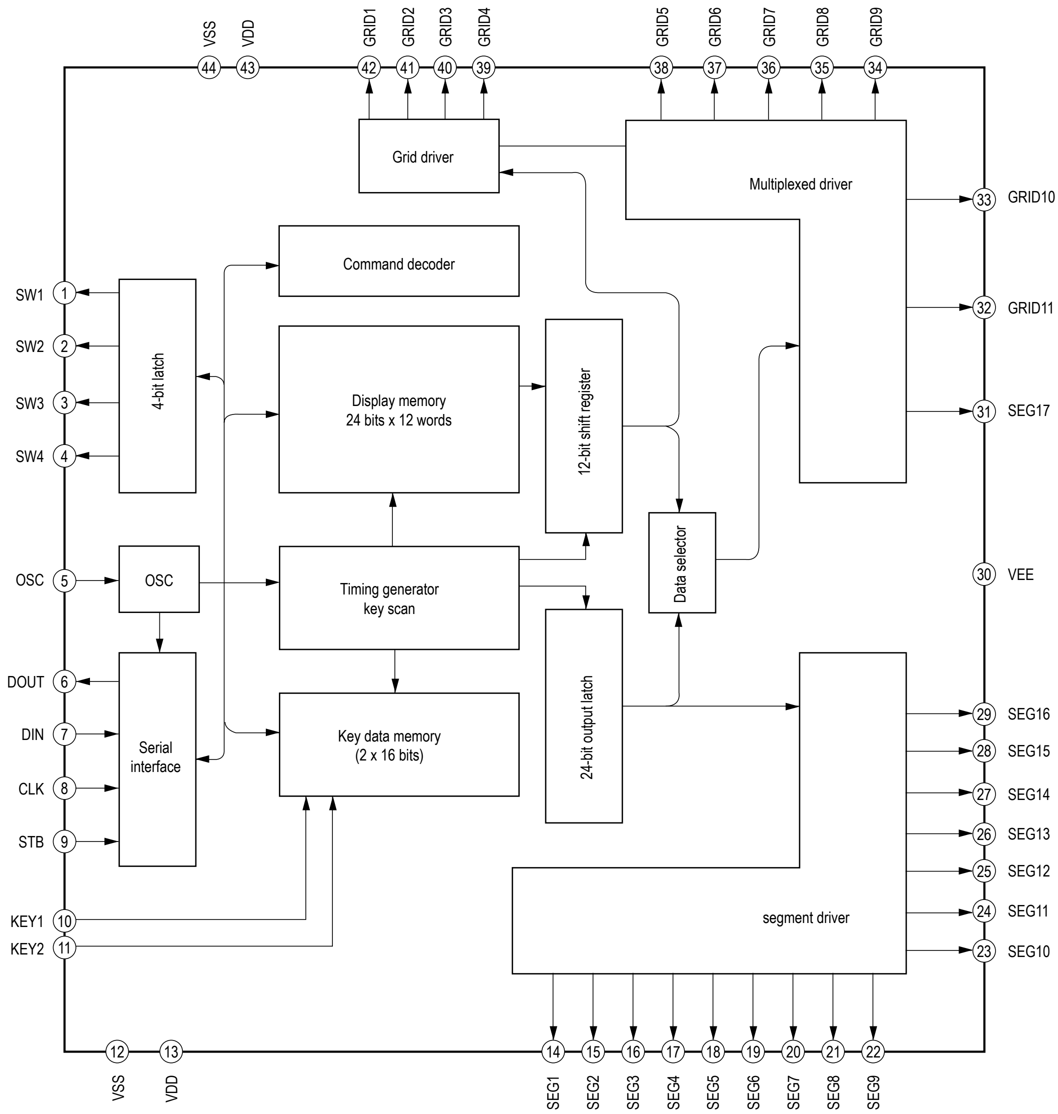
(FOR US AND CND MODEL ONLY)

【TUNER 1 BOARD】

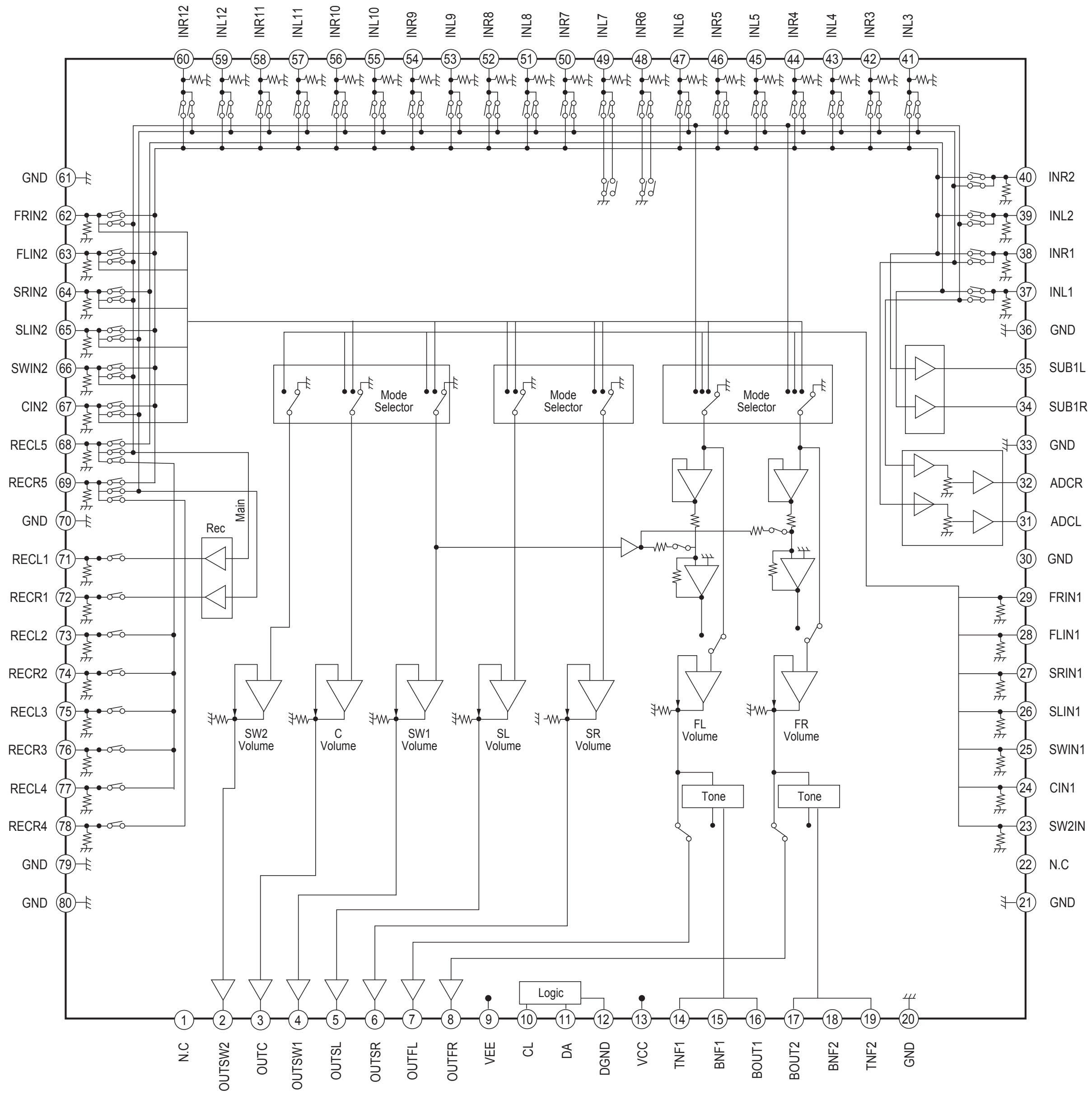


• **IC Block Diagrams**

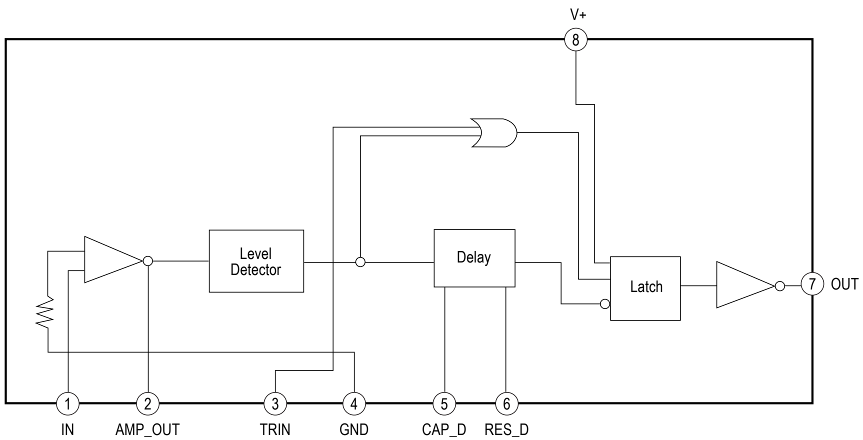
IC100 PT6315 (DISPLAY BOARD)



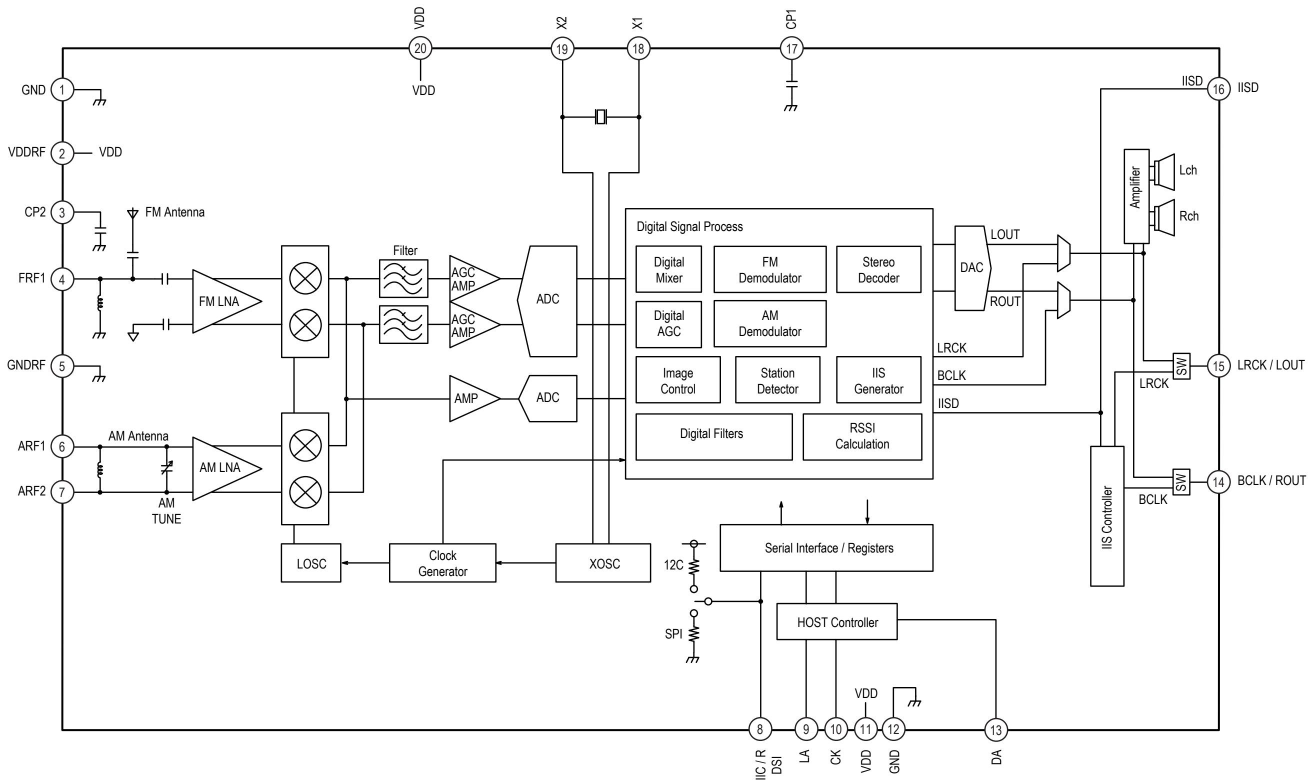
IC400 BD3474KS2 (MAIN BOARD (1/3))



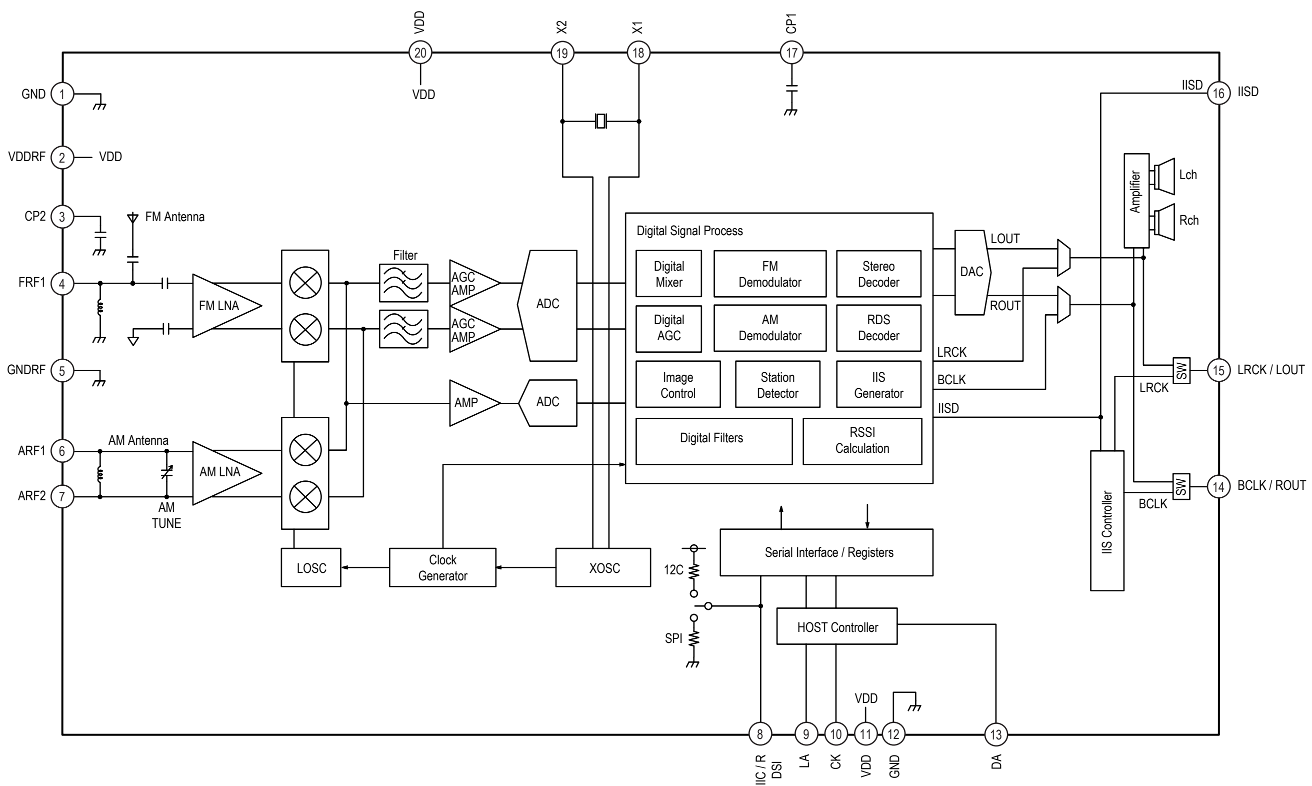
IC603 NJU7181RB1(TE2) (MAIN BOARD (1/3))



IC101 RZ5B801-0001E2 (TUNER1 Board) (US, CND)



IC101 RZ5B801-0002E2 (TUNER1 Board) (AEP)



- **IC Pin Function Descriptions**

MAIN BOARD (1/3) IC702 R5F364AEDFA

Pin No.	Pin Name	I/O	Description
1	FL_DATA	O	Serial data signal output to FL Driver, PT6315
2	FL_CLK	O	Serial clock signal output to FL Driver, PT6315
3	FL_LAT	O	Serial data latch signal output to FL Driver, PT6315 (H: Inactive, L: Active)
4	SIRCS_IN	I	Remote control signal input
5	VOL_IC_DATA	O	Serial data signal output to audio signal processor, BD3474KS2
6	NO-USE	O	NO-USE
7	VOL_IC_CLK	O	Serial clock signal output to audio signal processor, BD3474KS2
8	BYTE	—	Ground terminal
9	CNVss	—	Ground terminal
10	NO-USE	O	NO-USE
11	NO-USE	O	NO-USE
12	RESET	I	System reset signal input from the reset signal IC "L": reset After the power supply rises, "L" is input for several msec and then change to "H".
13	Xout	O	Main system clock output terminal (8MHz)
14	Vss	—	Ground terminal
15	Xin	I	Main system clock input terminal (8MHz)
16	Vcc1	—	Power supply terminal (+3.3V)
17	NMI	I	Non-maskable interrupt input terminal
18	NO-USE	O	NO-USE
19	NO-USE	O	NO-USE
20	AC_CUT	I	AC off detection signal input from the reset signal IC (H: AC In, L: AC Cut)
21	NO-USE	O	NO-USE
22	TUNER_SCL	I/O	Tuner IC: Clock signal for IIC communication
23	TUNER_RDS	I	Tuner IC: Input for RDS Text Detection Signal (H: No RDS, L: RDS Detect)
24	TUNER_SDA	I/O	Tuner IC: Data signal for IIC communication
25	TUNER_CE	O	Power Control for Tuner IC (H: On, L: Off)
26	NO-USE	O	NO-USE
27	NO-USE	O	NO-USE
28	NO-USE	O	NO-USE
29	I2C_CLK	I/O	Clock signal for IIC communication
30	I2C_DATA	I/O	Data signal for IIC communication
31	FLASH_TXD	I	Terminal for Debug / Flash
32	FLASH_RXD	I	Terminal for Debug / Flash
33	FLASH_CLK	I	Terminal for Debug / Flash
34	FLASH_RTS	I	Terminal for Debug / Flash
35	NO-USE	O	NO-USE
36	NO-USE	O	NO-USE
37	NO-USE	O	NO-USE
38	NO-USE	O	NO-USE
39	NO-USE	O	NO-USE
40	NO-USE	O	NO-USE
51	NO-USE	O	NO-USE
52	NO-USE	O	NO-USE
53	NO-USE	O	NO-USE
44	NO-USE	O	NO-USE
45	NO-USE	O	NO-USE
46	NO-USE	O	NO-USE
47	NO-USE	O	NO-USE
48	NO-USE	O	NO-USE
49	NO-USE	O	NO-USE
50	NO-USE	O	NO-USE
51	NO-USE	O	NO-USE
52	NO-USE	O	NO-USE
53	NO-USE	O	NO-USE

Pin No.	Pin Name	I/O	Description
54	NO-USE	O	NO-USE
55	NO-USE	O	NO-USE
56	NO-USE	O	NO-USE
57	NO-USE	O	NO-USE
58	NO-USE	O	NO-USE
59	NO-USE	O	NO-USE
60	NO-USE	O	NO-USE
61	NO-USE	O	NO-USE
62	Vcc2	—	Power supply terminal (+3.3V)
63	NO-USE	O	NO-USE
64	Vss	—	Ground terminal
65	AD_1	I	Key input terminal (A/D input)
66	AD_0	I	Key input terminal (A/D input)
67	VOL_JOG_B	I	Volume encoder input terminal
68	VOL_JOG_A	I	Volume encoder input terminal
69	INPUT-JOG_B	I	Input Selector encoder input terminal
70	INPUT-JOG_A	I	Input Selector encoder input terminal
71	NO-USE	O	NO-USE
72	NO-USE	O	NO-USE
73	POWER_SW	I	Power Key input (Interrupt) (H: Inactive, L: Active)
74	NO-USE	O	NO-USE
75	NO-USE	O	NO-USE
76	NO-USE	O	NO-USE
77	NO-USE	O	NO-USE
78	NO-USE	O	NO-USE
79	NO-USE	O	NO-USE
80	NO-USE	O	NO-USE
81	FUSE_DETECT	I	Fuse open detection signal input (H: Normal, L: Fuse Blown)
82	POWER_RY	O	Power relay driver control signal output (H: On, L: Off)
83	HP_RY	O	Headphone relay driver control signal output (H: On, L: Off)
84	BRIDGEABLE_RY	O	Bridgeable relay driver control signal output (H: Upper Tap, L: Lower Tap)
85	SP-A_RY	O	Front speaker A relay driver control signal output (H: On, L: Off)
86	SP-B_RY	O	Front speaker B relay driver control signal output (H: On, L: Off)
87	PROTECTOR	I	Protector detection signal input (H: Normal, L: Protect)
88	HP_DETECT	I	Headphone detection signal input (H: HP In, L: HP Out)
89	SOUND_DETECT	I	Sound detection signal input for Auto Standby (H: Sound, L: No Sound)
90	TEMP_SENSOR_1	I	Temperature detection signal input
91	TEMP_SENSOR_2	I	Temperature detection signal input
92	VACS_IN	I	VACS detection signal input
93	NO-USE	O	NO-USE
94	NO-USE	O	NO-USE
95	NO-USE	O	NO-USE
96	Vss	—	Ground terminal (for A/D conversion)
97	NO-USE	O	NO-USE
98	Vref	I	A/D Converter reference voltage input terminal (+3.3V)
99	AVcc	—	Power supply terminal (+3.3V) (for A/D conversion)
100	NO-USE	O	NO-USE

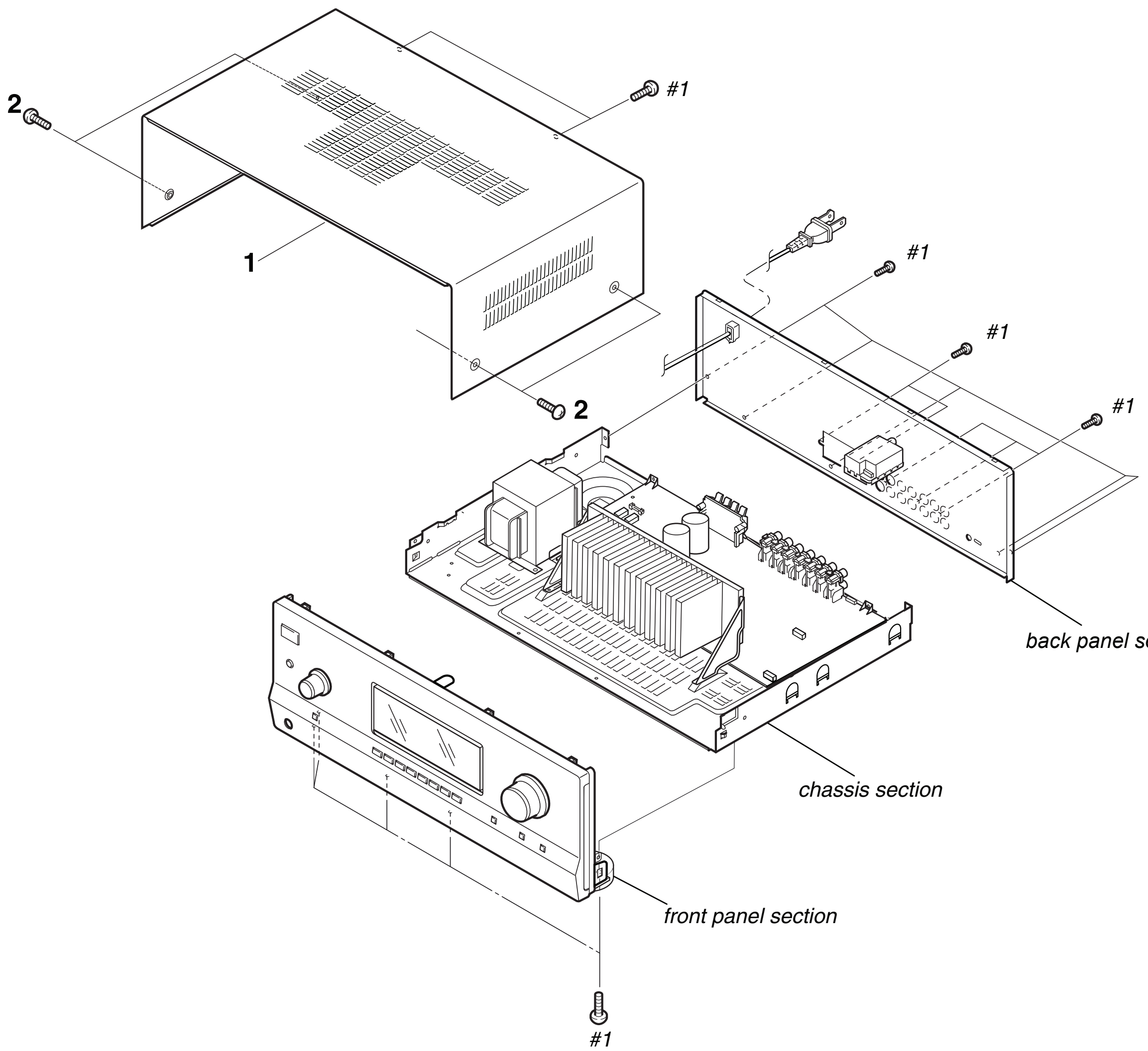
SECTION 5
EXPLODED VIEWS

Note:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- Abbreviation
  CND : Canadian model
- The mechanical parts with no reference number in the exploded views are not supplied.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories are given in the last of the electrical parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

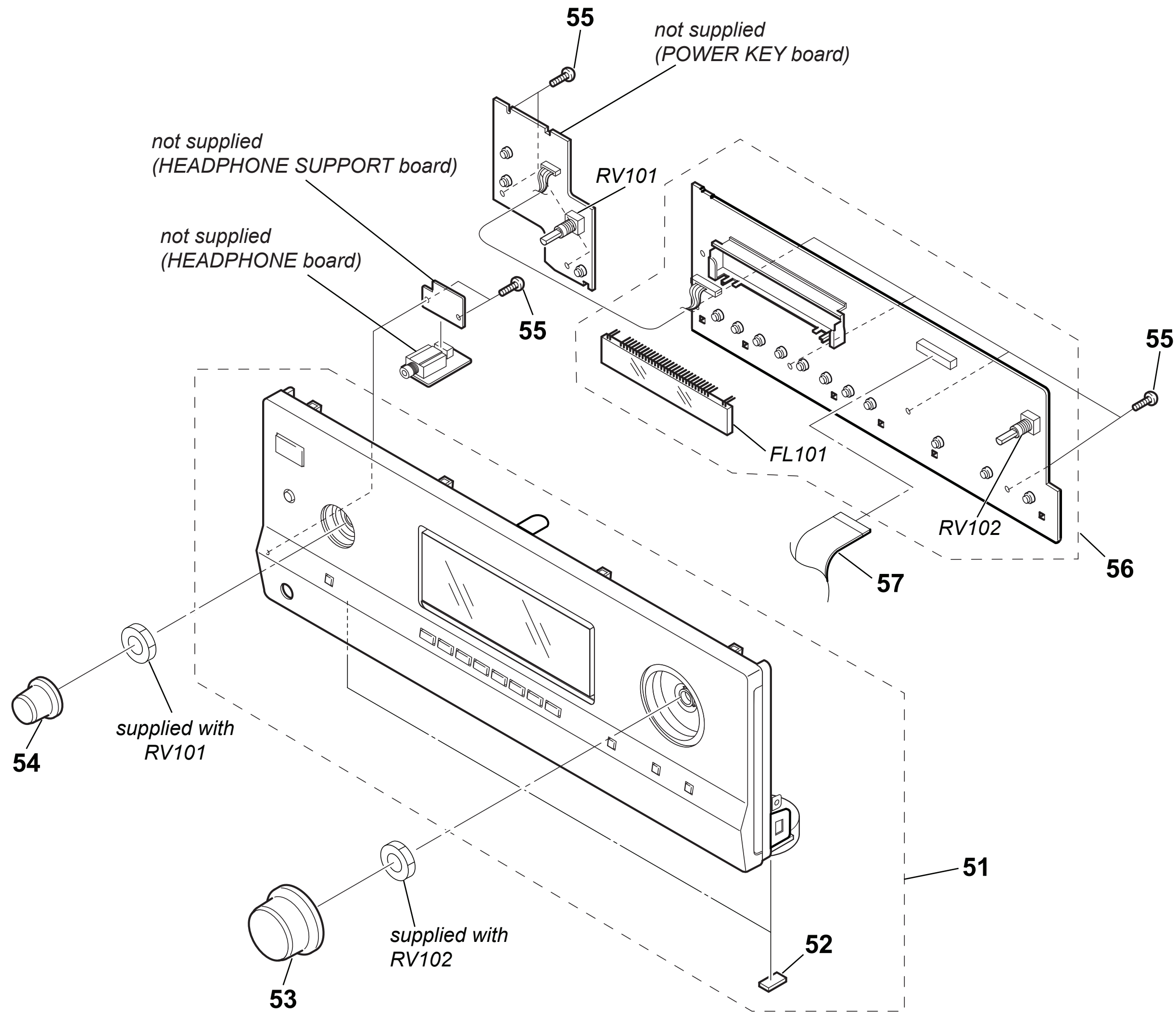
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

5-1. CASE SECTION



Ref. No.	Part No.	Description	Remark
1	4-124-567-31	CASE (G2)	
2	2-580-630-01	SCREW, +BVST 4X8	
#1	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3	

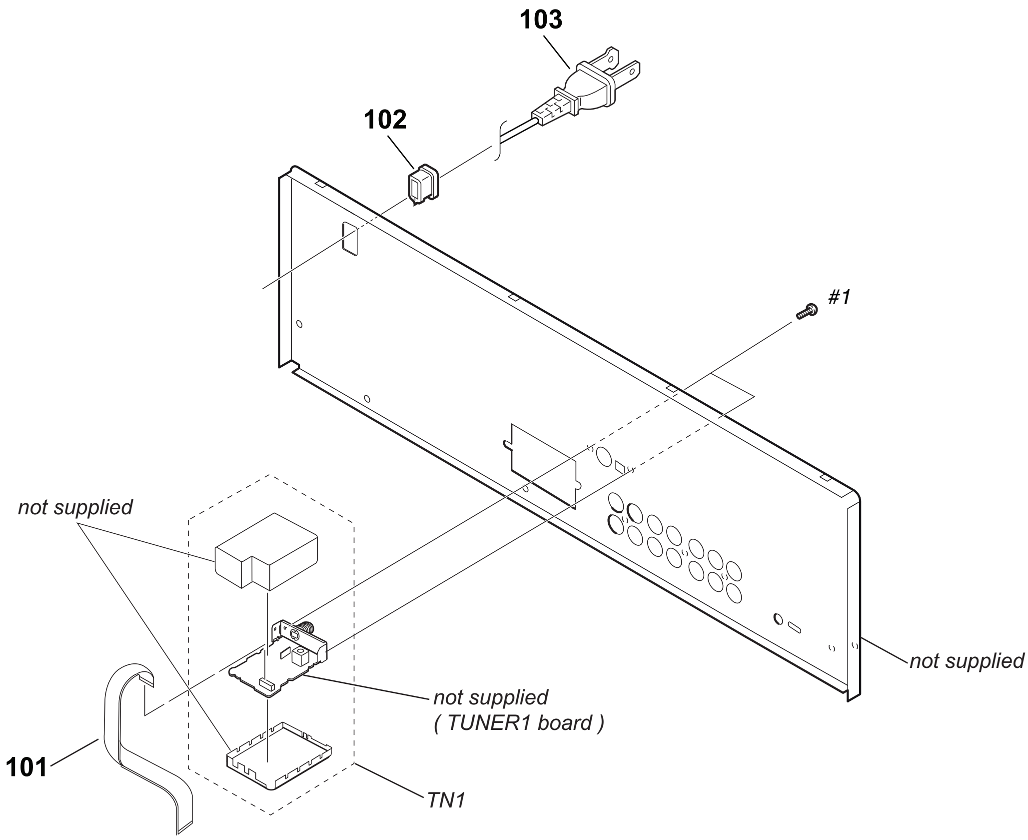
5-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-2582-985-1	FRONT PANEL ASSY (US, CND)	
51	X-2582-996-1	FRONT PANEL ASSY (AEP)	
52	4-977-358-11	CUSHION	
53	4-124-321-01	KNOB, VOLUME (G53)	
54	4-124-322-01	KNOB, INPUT (G53)	

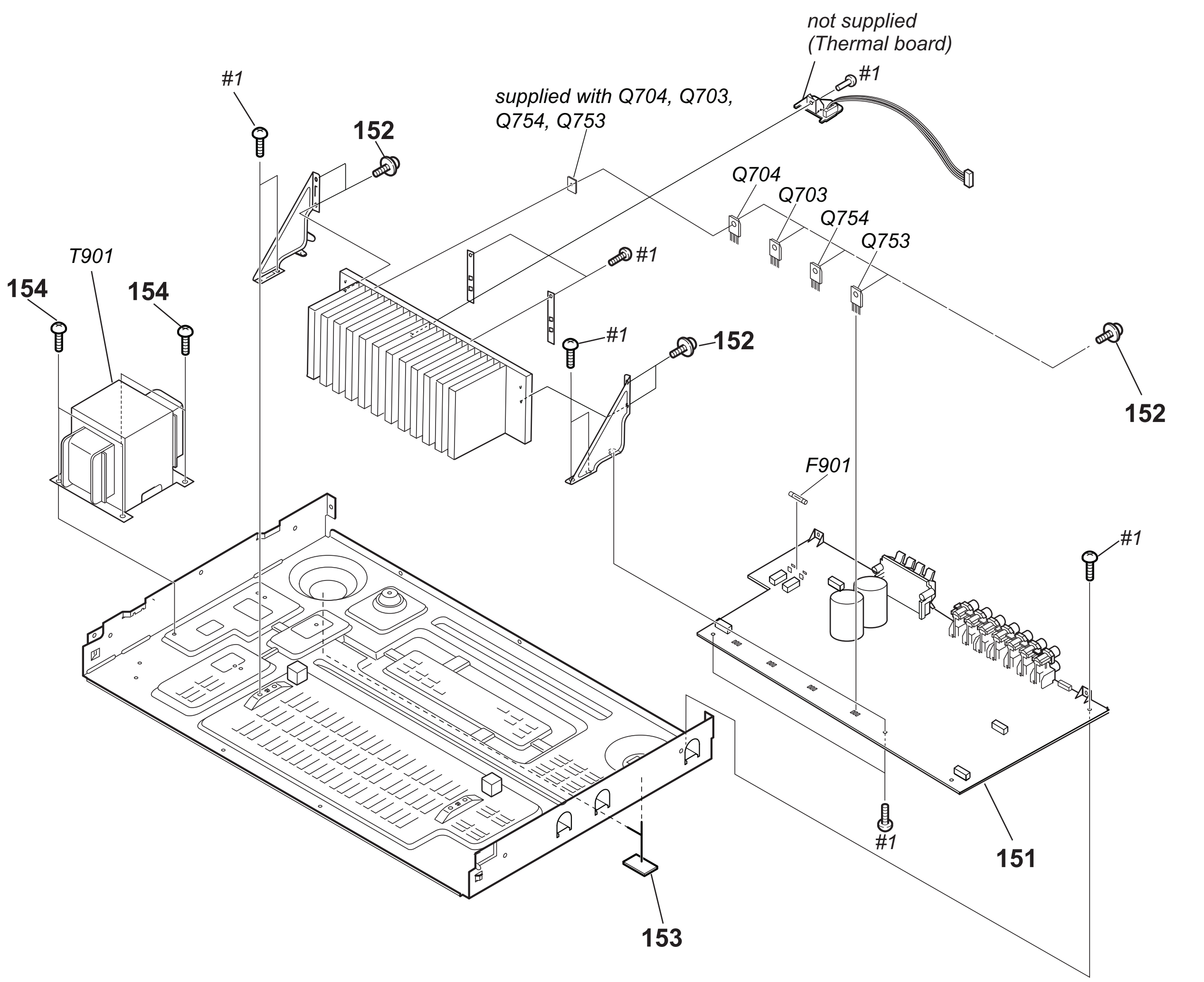
Ref. No.	Part No.	Description	Remark
55	3-087-053-01	+BVTP2.6 (3CR)	
56	A-1847-546-A	DISPLAY BOARD, COMPLETE	
57	1-828-985-61	WIRE (FLAT TYPE) (15 CORE)	
FL101	1-483-065-11	VACUMM FLOURESCENT DISPLAYS	
RV101	1-418-817-21	ENCODER, ROTARY (INPUT SELECTOR)	
RV102	1-418-725-41	ENCODER, ROTARY (12 TYPE) (MASTER VOLUME)	

5-3. BACK PANEL SECTION



Ref. No.	Part No.	Description	Remark
101	1-828-310-61	WIRE (FLAT TYPE) (9 CORE)	
102	4-966-267-12	BUSHING (FBS001), CORD	
⚠ 103	1-777-071-83	CORD, POWER (AEP)	
⚠ 103	1-837-308-11	CORD, POWER-SUPPLY (US, CND)	
TN1	A-1846-561-A	TUNER1AMPR ASSY (AEP)	
TN1	A-1846-564-A	TUNER1AMF ASSY (US, CND)	
#1	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3	

5-4. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
151	A-1847-542-A	MAIN BOARD, COMPLETE (US)	
151	A-1847-543-A	MAIN BOARD, COMPLETE (AEP)	
151	A-1879-666-A	MAIN BOARD, COMPLETE (CND)	
152	3-905-609-02	SCREW (TRANSISTOR)	
153	4-977-358-11	CUSHION	
154	4-249-675-02	+BV SUMITITE S 4X6 ROUND	
⚠ T901	1-697-119-11	POWER TRANSFORMER (US, CND)	
⚠ T901	1-697-120-11	POWER TRANSFORMER (AEP)	

Ref. No.	Part No.	Description	Remark
⚠ F901	1-532-464-33	FUSE, T2.5AL 250V (AEP)	
⚠ F901	1-533-453-12	FUSE, GLASS (DIA. 5) 5A 125V (US, CND)	
Q703	6-702-390-01	IC MN2488-OPY-MK	
Q704	6-702-391-01	IC MP1620-OPY-MK	
Q753	6-702-390-01	IC MN2488-OPY-MK	
Q754	6-702-391-01	IC MP1620-OPY-MK	
#1	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3	

DISPLAY

SECTION 6
ELECTRICAL PARTS LIST

Note:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- CAPACITORS
  uF: μF
- COILS
  uH: μH
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA. . : μA. . , uPA. . , μPA. . ,
  uPB. . : μPB. . , uPC. . , μPC. . ,
  uPD. . : μPD. .
- Abbreviation
  CND : Canadian model

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description				Remark
	A-1847-546-A	DISPLAY BOARD, COMPLETE				
		**********************				
		< CAPACITOR >				
C100	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V	
C101	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V	
C106	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
C107	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
C110	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	
C111	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	
C112	1-162-960-11	CERAMIC CHIP	220PF	10%	50V	
C114	1-100-909-11	CERAMIC CHIP	10uF	10%	6.3V	
C115	1-126-157-11	ELECT	10uF	20%	16V	
C144	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V	
C162	1-124-261-00	ELECT	10uF	20%	50V	
C163	1-116-452-91	CERAMIC CHIP	0.022uF	10%	50V	
C164	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	
C165	1-116-405-11	CERAMIC CHIP	0.01uF	10%	100V	
C166	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V	
C167	1-119-772-91	ELECT	47uF	20%	35V	
C168	1-165-722-11	ELECT	100uF	20%	10V	
		< CONNECTOR >				
CNS101	1-784-776-11	CONNECTOR, FFC 15P				
		< DIODE >				
D001	6-502-968-01	DI DZ2J062M0L				
D101	6-500-848-01	DIODE MC2840-T112-1				
D102	6-500-848-01	DIODE MC2840-T112-1				
		< FERRITE BEAD >				
FB100	1-469-152-11	FERRITE, EMI (SMD) (2012)				
FB101	1-400-862-11	BEAD, FERRITE				
		< FLUORESCENT INDICATOR TUBE >				
FL101	1-483-065-11	VACUMM FLOURESCENT DISPLAYS				
		< IC >				
IC100	6-701-729-01	IC PT6315				
IC103	6-600-768-01	IC PNA4823M03S0				
		< TRANSISTOR >				
Q001	6-550-065-01	TRANSISTOR CPH5504-TL-E				

Ref. No.	Part No.	Description				Remark
		< RESISTOR >				
R101	1-216-813-11	METAL CHIP	220	5%	1/10W	
R102	1-216-815-11	METAL CHIP	330	5%	1/10W	
R103	1-216-817-11	METAL CHIP	470	5%	1/10W	
R104	1-216-819-11	METAL CHIP	680	5%	1/10W	
R105	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R106	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	
R108	1-216-813-11	METAL CHIP	220	5%	1/10W	
R109	1-216-815-11	METAL CHIP	330	5%	1/10W	
R110	1-216-817-11	METAL CHIP	470	5%	1/10W	
R115	1-216-809-11	METAL CHIP	100	5%	1/10W	
R116	1-216-809-11	METAL CHIP	100	5%	1/10W	
R117	1-216-809-11	METAL CHIP	100	5%	1/10W	
R118	1-216-844-11	METAL CHIP	82K	5%	1/10W	
R119	1-216-809-11	METAL CHIP	100	5%	1/10W	
R120	1-216-797-11	METAL CHIP	10	5%	1/10W	
R122	1-216-839-11	METAL CHIP	33K	5%	1/10W	
R124	1-216-295-91	SHORT CHIP	0			
R198	1-240-915-11	RES-CHIP	1	1%	1/2W	
R199	1-240-915-11	RES-CHIP	1	1%	1/2W	
R200	1-216-828-11	METAL CHIP	3.9K	5%	1/10W	
R201	1-216-839-11	METAL CHIP	33K	5%	1/10W	
R202	1-216-809-11	METAL CHIP	100	5%	1/10W	
R203	1-216-809-11	METAL CHIP	100	5%	1/10W	
		< VARIABLE RESISTOR >				
RV102	1-418-725-41	ENCODER, ROTARY (12 TYPE) (MASTER VOLUME)				
		< SWITCH >				
S101	1-771-410-21	SWITCH, TACTILE (DIMMER)				
S102	1-771-410-21	SWITCH, TACTILE (MUTING MODE)				
S103	1-771-410-21	SWITCH, TACTILE (DISPLAY)				
S104	1-771-410-21	SWITCH, TACTILE (TREBLE +)				
S105	1-771-410-21	SWITCH, TACTILE (TREBLE -)				
S106	1-771-410-21	SWITCH, TACTILE (BASS +)				
S107	1-771-410-21	SWITCH, TACTILE (BASS -)				
S108	1-771-410-21	SWITCH, TACTILE (MEMORY/ENTER)				
S109	1-771-410-21	SWITCH, TACTILE (MUTING)				
S110	1-771-410-21	SWITCH, TACTILE (TUNING +)				
S111	1-771-410-21	SWITCH, TACTILE (TUNING -)				
		< TRANSFORMER >				
T001	1-445-231-11	TRANSFORMER, DC-DC CONVERTER				

****

	Ref. No.	Part No.	Description			Remark
			HEADPHONE BOARD			
			*****************			
			< CAPACITOR >			
	C792	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
	C793	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
			< CONNECTOR >			
*	CNP790	1-564-507-11	PLUG, CONNECTOR 4P			
			< JACK >			
	J790	1-822-967-12	JACK (PHONES)			

****

Ref. No.	Part No.	Description			Remark
	A-1847-542-A	MAIN BOARD, COMPLETE (US)			
	A-1847-543-A	MAIN BOARD, COMPLETE (AEP)			
	A-1879-666-A	MAIN BOARD, COMPLETE (CND)			
		********************			
		< CAPACITOR >			
C323	1-112-079-11	ELECT	220uF	20%	10V
C325	1-126-964-11	ELECT	10uF	20%	50V
C350	1-114-329-11	CERAMIC CHIP	0.47uF	10%	50V
C351	1-126-933-11	ELECT	100uF	20%	16V
C352	1-114-329-11	CERAMIC CHIP	0.47uF	10%	50V
C353	1-126-933-11	ELECT	100uF	20%	16V
C354	1-126-947-11	ELECT	47uF	20%	35V
C355	1-114-329-11	CERAMIC CHIP	0.47uF	10%	50V
C357	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C402	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C404	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C412	1-126-964-11	ELECT	10uF	20%	50V
C416	1-126-964-11	ELECT	10uF	20%	50V
C462	1-126-964-11	ELECT	10uF	20%	50V
C466	1-126-964-11	ELECT	10uF	20%	50V
C471	1-114-811-11	CERAMIC CHIP	0.0033uF	10%	50V
C472	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C473	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C476	1-114-811-11	CERAMIC CHIP	0.0033uF	10%	50V
C478	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C479	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C482	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C483	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C484	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C601	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C603	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C606	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C607	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C608	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C610	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C611	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C612	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C613	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C615	1-114-329-11	CERAMIC CHIP	0.47uF	10%	50V
C619	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C623	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C629	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C630	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C631	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C632	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C633	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C634	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C635	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C636	1-135-372-31	ELECT	470uF	20%	10V
C639	1-135-372-31	ELECT	470uF	20%	10V
C640	1-114-329-11	CERAMIC CHIP	0.47uF	10%	50V
C642	1-114-329-11	CERAMIC CHIP	0.47uF	10%	50V
C643	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C690	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C693	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C694	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C695	1-126-964-11	ELECT	10uF	20%	50V
C696	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C699	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C701	1-126-964-11	ELECT	10uF	20%	50V
C702	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C706	1-112-079-11	ELECT	220uF	20%	10V
C707	1-165-732-31	ELECT	47uF	20%	25V
C711	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C713	1-116-137-91	CERAMIC CHIP	12PF	5%	100V
C715	1-116-138-11	CERAMIC CHIP	4PF	0.25PF	100V
C718	1-114-128-91	CERAMIC CHIP	47PF	5%	100V
C719	1-114-128-91	CERAMIC CHIP	47PF	5%	100V
C724	1-100-152-91	CERAMIC CHIP	100PF	5%	100V
C725	1-100-152-91	CERAMIC CHIP	100PF	5%	100V
C729	1-136-157-00	FILM	0.022uF	5%	50V
C731	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C742	1-126-934-11	ELECT	220uF	20%	16V
C751	1-126-964-11	ELECT	10uF	20%	50V
C752	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C756	1-112-079-11	ELECT	220uF	20%	10V
C757	1-165-732-31	ELECT	47uF	20%	25V
C761	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C763	1-116-137-91	CERAMIC CHIP	12PF	5%	100V
C765	1-116-138-11	CERAMIC CHIP	4PF	0.25PF	100V
C768	1-114-128-91	CERAMIC CHIP	47PF	5%	100V
C769	1-114-128-91	CERAMIC CHIP	47PF	5%	100V
C779	1-136-157-00	FILM	0.022uF	5%	50V
C781	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C901	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C902	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C903	1-112-093-11	ELECT	2200uF	20%	25V
C906	1-126-960-11	ELECT	1uF	20%	50V
C910	1-114-329-11	CERAMIC CHIP	0.47uF	10%	50V
C911	1-114-329-11	CERAMIC CHIP	0.47uF	10%	50V
C912	1-126-936-11	ELECT	3300uF	20%	16V
C920	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C921	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
C922	1-112-093-11	ELECT	2200uF	20%	25V
C923	1-126-942-61	ELECT	1000uF	20%	25V
C930	1-165-554-91	CERAMIC CHIP	0.1uF	10%	100V
C931	1-165-554-91	CERAMIC CHIP	0.1uF	10%	100V
C932	1-165-946-11	ELECT (BLOCK)	6800uF	20%	71V
C933	1-165-946-11	ELECT (BLOCK)	6800uF	20%	71V
C934	1-126-941-11	ELECT	470uF	20%	25V
C935	1-104-666-11	ELECT	220uF	20%	25V
CC01	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
CC02	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
CC03	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
CC04	1-162-927-11	CERAMIC CHIP	100PF	5%	50V

MAIN

Ref. No.	Part No.	Description	Remark
CC05	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC06	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC07	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC09	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC10	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC11	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
CC12	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
CC13	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
CC14	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
CC51	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC52	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC53	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC54	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC55	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC56	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
CC57	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
		< CONNECTOR >	
* CNP250	1-564-507-11	PLUG, CONNECTOR 4P (US, CND)	
* CNP901	1-793-660-11	PIN, CONNECTOR (PC BOARD) 3P	
* CNP902	1-565-792-11	PIN, CONNECTOR (3.96mm PITCH) 2P	
* CNP911	1-564-508-11	PLUG, CONNECTOR 5P	
CNP930	1-564-242-00	PIN, CONNECTOR (3.96mm PITCH) 5P	
CNS402	1-779-277-11	CONNECTOR, FFC (LIF (NON-ZIF)) 9P	
CNS600	1-784-776-11	CONNECTOR, FFC 15P	
CNS602	1-779-546-11	CONNECTOR, FFC (LIF (NON-ZIF)) 9P	
		< DIODE >	
D325	6-500-335-01	DIODE MC2838-T112-1	
D326	6-500-335-01	DIODE MC2838-T112-1	
D350	6-502-961-01	DI DA2J10100L	
D352	8-719-053-18	DIODE 1SR154-400TE-25	
D355	6-502-961-01	DI DA2J10100L	
D356	6-500-885-01	DIODE P6SMBJ33A-5	
D360	6-502-961-01	DI DA2J10100L	
D601	6-502-961-01	DI DA2J10100L	
D602	6-500-335-01	DIODE MC2838-T112-1	
D701	6-502-961-01	DI DA2J10100L	
D741	6-503-015-01	DI DZ2J051M0L	
D750	6-500-335-01	DIODE MC2838-T112-1	
D751	6-502-961-01	DI DA2J10100L	
D901	6-502-961-01	DI DA2J10100L	
D902	6-500-848-01	DIODE MC2840-T112-1	
D903	6-500-848-01	DIODE MC2840-T112-1	
D906	6-500-335-01	DIODE MC2838-T112-1	
D910	8-719-053-18	DIODE 1SR154-400TE-25	
D911	8-719-053-18	DIODE 1SR154-400TE-25	
D912	8-719-053-18	DIODE 1SR154-400TE-25	
D913	8-719-053-18	DIODE 1SR154-400TE-25	
D920	8-719-053-18	DIODE 1SR154-400TE-25	
D921	8-719-053-18	DIODE 1SR154-400TE-25	
D922	8-719-053-18	DIODE 1SR154-400TE-25	
D923	8-719-053-18	DIODE 1SR154-400TE-25	
D930	6-502-961-01	DI DA2J10100L	
D931	8-719-061-07	DIODE D5SBA60-F	
		< FUSE >	
⚠ F910	1-523-084-11	FUSE 2A 250V	
⚠ F920	1-523-084-11	FUSE 2A 250V	
⚠ F921	1-523-084-11	FUSE 2A 250V	

Ref. No.	Part No.	Description	Remark
		< FERRITE BEAD >	
FB600	1-400-862-11	BEAD, FERRITE	
		< FUSE HOLDER >	
FH901	1-533-217-41	HOLDER, FUSE	
FH902	1-533-217-41	HOLDER, FUSE	
		< IC >	
IC350	6-718-129-01	IC KIA7807AF-RTF/P	
IC352	6-718-108-01	IC KIA7907F-RTF/P	
IC400	6-713-813-01	IC BD3474KS2	
IC602	6-702-913-01	IC S-80929CNMC-G8ZT2G	
IC603	6-716-302-01	IC NJU7181RB1 (TE2)	
IC604	6-705-468-01	IC BA33BC0FP-E2	
IC606	6-705-469-01	IC BA50BC0FP-E2	
IC700	6-715-582-01	IC STK350-630TS-E	
IC701	6-717-138-01	IC KIA7805AF-RTF/PW	
IC702	A-1856-187-A	IC R5F364AEDFA (for SERVICE) (US)	
IC702	A-1879-668-A	IC R5F364AEDFA (for SERVICE) (CND)	
IC702	A-1879-669-A	IC R5F364AEDFA (for SERVICE) (AEP)	
		< JACK >	
J401	1-794-981-11	JACK, PIN 4P (SA-CD/CD AUDIO IN, MD/TAPE AUDIO OUT)	
J402	1-794-981-11	JACK, PIN 4P (MD/TAPE AUDIO IN, SAT AUDIO IN)	
J403	1-774-411-11	JACK, PIN 6P (BD/DVD AUDIO IN, VIDEO AUDIO IN/OUT)	
J404	1-820-056-21	SMALL TYPE JACK (3.5MM) (PORTABLE IN)	
		< COIL >	
L728	1-420-872-52	COIL, AIR-CORE	
L778	1-420-872-52	COIL, AIR-CORE	
		< TRANSISTOR >	
Q323	6-550-327-01	TR 2SA1514KT146S	
Q324	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q325	8-729-271-31	TRANSISTOR 2SC2713-G	
Q350	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q355	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q360	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q601	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q701	8-729-216-22	TRANSISTOR 2SA1162-G	
Q702	8-729-922-39	TRANSISTOR 2SD2144S-V	
Q711	6-550-327-01	TR 2SA1514KT146S	
Q712	6-550-327-01	TR 2SA1514KT146S	
Q751	8-729-216-22	TRANSISTOR 2SA1162-G	
Q752	8-729-922-39	TRANSISTOR 2SD2144S-V	
Q761	6-550-327-01	TR 2SA1514KT146S	
Q762	6-550-327-01	TR 2SA1514KT146S	
Q901	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q906	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q930	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
		< RESISTOR >	
R323	1-216-839-11	METAL CHIP 33K 5% 1/10W	
R325	1-218-867-11	METAL CHIP 6.8K 0.5% 1/10W	
R326	1-216-839-11	METAL CHIP 33K 5% 1/10W	
R327	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R328	1-216-821-11	METAL CHIP 1K 5% 1/10W	

Ref. No.	Part No.	Description			Remark
R350	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R351	1-249-381-11	CARBON	1	5%	1/4W
R353	1-216-841-11	METAL CHIP	47K	5%	1/10W
R354	1-216-833-11	METAL CHIP	10K	5%	1/10W
R355	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R356	1-249-381-11	CARBON	1	5%	1/4W
R358	1-216-841-11	METAL CHIP	47K	5%	1/10W
R359	1-216-835-11	METAL CHIP	15K	5%	1/10W
R360	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R361	1-249-381-11	CARBON	1	5%	1/4W
R363	1-216-841-11	METAL CHIP	47K	5%	1/10W
R392	1-218-632-11	METAL CHIP	330	5%	1W
R393	1-218-632-11	METAL CHIP	330	5%	1W
R394	1-218-632-11	METAL CHIP	330	5%	1W
R395	1-218-632-11	METAL CHIP	330	5%	1W
R411	1-216-821-11	METAL CHIP	1K	5%	1/10W
R412	1-216-821-11	METAL CHIP	1K	5%	1/10W
R413	1-216-821-11	METAL CHIP	1K	5%	1/10W
R414	1-216-821-11	METAL CHIP	1K	5%	1/10W
R415	1-216-821-11	METAL CHIP	1K	5%	1/10W
R416	1-216-821-11	METAL CHIP	1K	5%	1/10W
R417	1-216-821-11	METAL CHIP	1K	5%	1/10W
R420	1-216-821-11	METAL CHIP	1K	5%	1/10W
R461	1-216-821-11	METAL CHIP	1K	5%	1/10W
R462	1-216-821-11	METAL CHIP	1K	5%	1/10W
R463	1-216-821-11	METAL CHIP	1K	5%	1/10W
R464	1-216-821-11	METAL CHIP	1K	5%	1/10W
R465	1-216-821-11	METAL CHIP	1K	5%	1/10W
R466	1-216-821-11	METAL CHIP	1K	5%	1/10W
R467	1-216-821-11	METAL CHIP	1K	5%	1/10W
R470	1-216-821-11	METAL CHIP	1K	5%	1/10W
R471	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R476	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R501	1-216-864-11	SHORT CHIP	0		
R502	1-216-864-11	SHORT CHIP	0		
R545	1-249-377-11	CARBON	0.47	5%	1/4W
R546	1-249-377-11	CARBON	0.47	5%	1/4W
R600	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R603	1-216-833-11	METAL CHIP	10K	5%	1/10W
R604	1-216-833-11	METAL CHIP	10K	5%	1/10W
R605	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R607	1-216-833-11	METAL CHIP	10K	5%	1/10W
R608	1-216-833-11	METAL CHIP	10K	5%	1/10W
R611	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R613	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R614	1-216-809-11	METAL CHIP	100	5%	1/10W
R615	1-216-809-11	METAL CHIP	100	5%	1/10W
R616	1-216-809-11	METAL CHIP	100	5%	1/10W
R617	1-216-809-11	METAL CHIP	100	5%	1/10W
R618	1-216-833-11	METAL CHIP	10K	5%	1/10W
R619	1-216-833-11	METAL CHIP	10K	5%	1/10W
R620	1-216-833-11	METAL CHIP	10K	5%	1/10W
R621	1-216-813-11	METAL CHIP	220	5%	1/10W
R622	1-216-809-11	METAL CHIP	100	5%	1/10W
R623	1-216-809-11	METAL CHIP	100	5%	1/10W
R624	1-216-809-11	METAL CHIP	100	5%	1/10W
R626	1-216-833-11	METAL CHIP	10K	5%	1/10W
R628	1-216-833-11	METAL CHIP	10K	5%	1/10W
R629	1-216-833-11	METAL CHIP	10K	5%	1/10W
R631	1-216-833-11	METAL CHIP	10K	5%	1/10W
R635	1-216-809-11	METAL CHIP	100	5%	1/10W
R641	1-216-833-11	METAL CHIP	10K	5%	1/10W
R643	1-216-833-11	METAL CHIP	10K	5%	1/10W
R645	1-216-833-11	METAL CHIP	10K	5%	1/10W
R650	1-216-864-11	SHORT CHIP	0		
R651	1-216-809-11	METAL CHIP	100	5%	1/10W
R652	1-216-809-11	METAL CHIP	100	5%	1/10W
R657	1-216-857-11	METAL CHIP	1M	5%	1/10W
R658	1-216-847-11	METAL CHIP	150K	5%	1/10W
R661	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R662	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R663	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R666	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R667	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R675	1-216-833-11	METAL CHIP	10K	5%	1/10W
R676	1-216-809-11	METAL CHIP	100	5%	1/10W
R681	1-216-833-11	METAL CHIP	10K	5%	1/10W
R682	1-216-809-11	METAL CHIP	100	5%	1/10W
R683	1-216-833-11	METAL CHIP	10K	5%	1/10W
R684	1-216-809-11	METAL CHIP	100	5%	1/10W
R685	1-216-833-11	METAL CHIP	10K	5%	1/10W
R686	1-216-809-11	METAL CHIP	100	5%	1/10W
R688	1-216-809-11	METAL CHIP	100	5%	1/10W
R689	1-216-809-11	METAL CHIP	100	5%	1/10W
R690	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R691	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R692	1-216-809-11	METAL CHIP	100	5%	1/10W (US, CND)
R693	1-216-809-11	METAL CHIP	100	5%	1/10W (US, CND)
R694	1-216-833-11	METAL CHIP	10K	5%	1/10W
R695	1-216-849-11	METAL CHIP	220K	5%	1/10W
R696	1-216-849-11	METAL CHIP	220K	5%	1/10W
R697	1-216-837-11	METAL CHIP	22K	5%	1/10W
R701	1-216-821-11	METAL CHIP	1K	5%	1/10W
R702	1-216-843-11	METAL CHIP	68K	5%	1/10W
R703	1-208-445-41	RES-CHIP	2.2K	2%	1/10W
R704	1-208-826-11	METAL CHIP	68K	0.5%	1/10W
R706	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R707	1-216-844-11	METAL CHIP	82K	5%	1/10W
R708	1-216-818-11	METAL CHIP	560	5%	1/10W
R709	1-249-405-11	CARBON	100	5%	1/4W
R710	1-249-405-11	CARBON	100	5%	1/4W
R711	1-216-214-00	RES-CHIP	4.7K	2%	1/8W
R712	1-240-855-91	CARBON	6.2K	5%	1/4W
R713	1-234-182-11	ENCAPSULATED COMPONENT			
R714	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R715	1-216-835-11	METAL CHIP	15K	5%	1/10W
R716	1-216-843-11	METAL CHIP	68K	5%	1/10W
R728	1-249-389-11	CARBON	4.7	5%	1/4W
R729	1-249-393-11	CARBON	10	5%	1/4W
R730	1-216-841-11	METAL CHIP	47K	5%	1/10W
R731	1-216-833-11	METAL CHIP	10K	5%	1/10W
R732	1-216-845-11	METAL CHIP	100K	5%	1/10W
R742	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R743	1-216-837-11	METAL CHIP	22K	5%	1/10W
R744	1-216-837-11	METAL CHIP	22K	5%	1/10W
R751	1-216-821-11	METAL CHIP	1K	5%	1/10W
R752	1-216-843-11	METAL CHIP	68K	5%	1/10W
R753	1-208-445-41	RES-CHIP	2.2K	2%	1/10W
R754	1-208-826-11	METAL CHIP	68K	0.5%	1/10W

	Ref. No.	Part No.	Description			Remark
	R756	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
	R757	1-216-844-11	METAL CHIP	82K	5%	1/10W
	R758	1-216-818-11	METAL CHIP	560	5%	1/10W
	R759	1-249-405-11	CARBON	100	5%	1/4W
	R760	1-249-405-11	CARBON	100	5%	1/4W
	R761	1-216-214-00	RES-CHIP	4.7K	2%	1/8W
	R762	1-240-855-91	CARBON	6.2K	5%	1/4W
	R763	1-234-182-11	ENCAPSULATED COMPONENT			
	R764	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
	R765	1-216-835-11	METAL CHIP	15K	5%	1/10W
	R766	1-216-843-11	METAL CHIP	68K	5%	1/10W
	R778	1-249-389-11	CARBON	4.7	5%	1/4W
	R779	1-249-393-11	CARBON	10	5%	1/4W
	R780	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R781	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R782	1-216-845-11	METAL CHIP	100K	5%	1/10W
	R902	1-249-399-11	CARBON	33	5%	1/4W
	R903	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
	R904	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R906	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R907	1-216-864-11	SHORT CHIP	0		
	R908	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R931	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
	R932	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R933	1-249-381-11	CARBON	1	5%	1/4W
			< RF MODULATOR >			
	RR11	1-249-393-11	CARBON	10	5%	1/4W
	RR12	1-249-393-11	CARBON	10	5%	1/4W
	RR13	1-249-393-11	CARBON	10	5%	1/4W
	RR14	1-249-393-11	CARBON	10	5%	1/4W
			< RELAY >			
	RY350	1-755-307-21	RELAY			
	RY355	1-755-307-21	RELAY			
	RY360	1-755-307-21	RELAY			
⚠	RY901	1-755-541-11	RELAY			
	RY930	1-755-593-11	RELAY			
			< TRANSFORMER >			
⚠	T902	1-443-517-11	POWER TRANSFORMER (AEP)			
⚠	T902	1-445-635-11	POWER TRANSFORMER (US, CND)			
			< TERMINAL >			
	TB401	1-537-376-11	TERMINAL BOARD (SPEAKERS) A(L, R) B(L, R))			
			< VIBRATOR >			
	X313	1-781-472-21	VIBRATOR, CERAMIC			

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POWER KEY BOARD
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	Ref. No.	Part No.	Description			Remark
			< CAPACITOR >			
	C151	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
	C153	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
			< CONNECTOR >			
*	CNP102	1-564-508-11	PLUG, CONNECTOR 5P			
			< RESISTOR >			
	R133	1-216-819-11	METAL CHIP	680	5%	1/10W
	R134	1-216-821-11	METAL CHIP	1K	5%	1/10W
			< VARIABLE RESISTOR >			
	RV101	1-418-817-21	ENCODER, ROTARY (INPUT SELECTOR)			
			< SWITCH >			
	S120	1-771-410-21	SWITCH, TACTILE (SPEAKERS OFF/A/B/A+B)			
	S153	1-771-410-21	SWITCH, TACTILE (I/⏻)			
	S154	1-771-410-21	SWITCH, TACTILE (FM MODE)			

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THERMAL BOARD (US, CND)
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	Ref. No.	Part No.	Description			Remark
			< CAPACITOR >			
	C250	1-114-868-11	CERAMIC CHIP	0.1uF	10%	50V
			< THERMISTOR >			
⚠	THR251	1-804-045-11	THERMISTOR			
⚠	THR252	1-804-045-11	THERMISTOR			

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TUNER1 BOARD
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	Ref. No.	Part No.	Description			Remark
			< CAPACITOR >			
	C101	1-100-155-91	CERAMIC CHIP	470PF	5%	100V
	C102	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
	C103	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
	C105	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
	C106	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
	C107	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
	C108	1-116-729-11	CERAMIC CHIP	2.2uF	20%	10V
	C109	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
	C110	1-116-717-11	CERAMIC CHIP	10uF	20%	10V
	C111	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
	C112	1-116-734-11	CERAMIC CHIP	1uF	20%	16V
			< CONNECTOR >			
	CN101	1-779-277-11	CONNECTOR, FFC (LIF (NON-ZIF)) 9P			
*	CN103	1-506-680-11	PLUG, CONNECTOR (2.5MM) 3P			
	CN104	1-780-920-11	TERMINAL (FMAMF) (US, CND)			
			< DIODE >			
	D101	6-501-579-01	DIODE MC2837			
	D102	6-501-579-01	DIODE MC2837			
	D103	6-501-579-01	DIODE MC2837			
			< FLUORESCENT INDICATOR TUBE >			
	FL101	1-236-711-21	FILTER, BAND PASS			
			< IC >			
	IC101	6-717-980-01	IC RZ5B801-0001E2 (US, CND)			
	IC101	6-717-981-01	IC RZ5B801-0002E2 (AEP)			
	IC102	6-715-134-01	IC MM3404A33URE			

Ref. No.	Part No.	Description			Remark
		< JUMPER RESISTOR >			
JR101	1-216-864-11	SHORT CHIP	0		
JR102	1-216-296-11	SHORT CHIP	0		
JR105	1-216-296-11	SHORT CHIP	0		
JR106	1-216-864-11	SHORT CHIP	0		
JR109	1-216-296-11	SHORT CHIP	0		
JR112	1-216-296-11	SHORT CHIP	0		
		< COIL >			
L101	1-457-998-11	COIL, AM ANTENNA			
L103	1-414-576-41	INDUCTOR	47nH		
L104	1-481-330-21	INDUCTOR	220nH		
L105	1-481-523-11	INDUCTOR	4.7uH		
		< RESISTOR >			
R101	1-216-809-11	METAL CHIP	100	5%	1/10W
R103	1-216-801-11	METAL CHIP	22	5%	1/10W
R104	1-216-864-11	SHORT CHIP	0		
R105	1-216-801-11	METAL CHIP	22	5%	1/10W
R106	1-216-809-11	METAL CHIP	100	5%	1/10W
R107	1-216-809-11	METAL CHIP	100	5%	1/10W
R108	1-216-296-11	SHORT CHIP	0		
R109	1-216-864-11	SHORT CHIP	0		
R110	1-216-833-11	METAL CHIP	10K	5%	1/10W
R113	1-216-833-11	METAL CHIP	10K	5%	1/10W
		< VIBRATOR >			
X101	1-767-317-11	VIBRATOR, CRYSTAL			

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MISCELLANEOUS
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Ref. No.	Part No.	Description	Remark
57	1-828-985-61	WIRE (FLAT TYPE) (15 CORE)	
101	1-828-310-61	WIRE (FLAT TYPE) (9 CORE)	
⚠ 103	1-777-071-83	CORD, POWER (AEP)	
⚠ 103	1-837-308-11	CORD, POWER-SUPPLY (US, CND)	
TN1	A-1846-561-A	TUNER1AMPR ASSY (AEP)	
TN1	A-1846-564-A	TUNER1AMF ASSY (US, CND)	
⚠ T901	1-697-119-11	POWER TRANSFORMER (US, CND)	
⚠ T901	1-697-120-11	POWER TRANSFORMER (AEP)	
⚠ F901	1-532-464-33	FUSE, T2.5AL 250V (AEP)	
⚠ F901	1-533-453-12	FUSE, GLASS (DIA. 5) 5A 125V (US, CND)	
Q703	6-702-390-01	IC MN2488-OPY-MK	
Q704	6-702-391-01	IC MP1620-OPY-MK	
Q753	6-702-390-01	IC MN2488-OPY-MK	
Q754	6-702-391-01	IC MP1620-OPY-MK	

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ACCESSORIES
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Ref. No.	Part No.	Description	Remark
	1-490-078-11	REMOTE COMMANDER (RM-AAU130) (including BATERY LID)	
	1-754-741-11	LOOP ANTENNA (AM loop antenna (aerial))	
	1-756-988-21	BATTERY, MANGANESE (R6)	
	1-793-184-51	CONNECTOR (F TYPE ADAPTOR) (FM wire antenna (aerial))	
	2-652-132-01	CARD, WARRANTY (2 YEAR), CANADA (CND)	
	4-294-472-11	INSTRUCTION MANUAL (ENGLISH) (US, CND)	
	4-294-472-21	INSTRUCTION MANUAL (FRENCH) (CND, AEP)	
	4-294-472-31	INSTRUCTION MANUAL (SPANISH) (AEP)	
	4-294-472-41	INSTRUCTION MANUAL (GERMAN, DUTCH, ITALIAN, POLISH) (AEP)	
	4-294-472-51	INSTRUCTION MANUAL (SPANISH) (US)	

REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2012.01	New